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ABSTRACT

A cornerstone of Mississippi's 1982 Education Reform Act, the Assistant Reading Instructor Program sought to improve basic skills acquisition by placing assistant reading instructors in primary grades. The program has not been effective in meeting its objectives. On standardized tests, students who had assistant reading instructors in the primary years scored about the same as students without assistants. Retention rates in the primary grades remained about the same. Dropout rates remained constant in the lower grades and increased in higher grades. Contrary to Mississippi state law, the State Department of Education has not enforced preconditions to program funding and has not developed a statewide uniform training program. The districts and department failed to develop implementation and accountability plans and failed to perform annual program evaluations. In violation of program intent, some districts routinely use assistants as substitute teachers. From 1983 until the close of the 1993-94 school year, the state spent $340.11 million on the program. Policy options include: (1) make the program work as originally intended; (2) convert the program into a Teacher's Aide program; (3) divert the money used for the program to other educational programs; and (4) abolish the program and redirect the funds. (Contains 11 exhibits. Seventeen appendixes present related legislation, data, descriptions of other programs, and methods for computing some of the data.) (RS)

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Report To

The Mississippi Legislature

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An Evaluation of Mississippi's Assistant Reading Instructor Program

December 13, 1994

A cornerstone of the 1982 Education Reform Act, the Assistant Reading Instructor Program sought to improve basic skills acquisition by placing assistant reading instructors in primary grades. The program has not been effective in meeting its objectives.

- On standardized tests, students who had assistant reading instructors in their primary years scored about the same as students without assistants.
- Retention rates in the primary grades remained about the same.
- Dropout rates remained constant in lower grades and increased in higher grades.

Contrary to state law, the State Department of Education has not enforced preconditions to program funding and has not developed a statewide uniform training program. The districts and the department failed to develop implementation and accountability plans and failed to perform annual program evaluations. In violation of program intent, some districts routinely use assistants as substitute teachers.

From 1983 until the close of the 1993-94 school year, the state spent $340.11 million on this program. Local districts spent approximately $18.75 million over the past five years. The FY 1995 state general fund appropriation is $49.35 million for 4,785 assistant reading instructors.

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The PEER Committee

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PEER: The Mississippi Legislature's Oversight Agency

The Mississippi Legislature created the Joint Legislative Committee on Performance Evaluation and Expenditure Review (PEER Committee) by statute in 1973. A standing joint committee, the PEER Committee is composed of five members of the House of Representatives appointed by the Speaker and five members of the Senate appointed by the Lieutenant Governor. Appointments are made for four-year terms with one Senator and one Representative appointed from each of the U. S. Congressional Districts. Committee officers are elected by the membership with officers alternating annually between the two houses. All Committee actions by statute require a majority vote of three Representatives and three Senators voting in the affirmative.

Mississippi's constitution gives the Legislature broad power to conduct examinations and investigations. PEER is authorized by law to review any public entity, including contractors supported in whole or in part by public funds, and to address any issues which may require legislative action. PEER has statutory access to all state and local records and has subpoena power to compel testimony or the production of documents.

PEER provides a variety of services to the Legislature, including program evaluations, economy and efficiency reviews, financial audits, limited scope evaluations, fiscal notes, special investigations, briefings to individual legislators, testimony, and other governmental research and assistance. The Committee identifies inefficiency or ineffectiveness or a failure to accomplish legislative objectives, and makes recommendations for redefinition, redirection, redistribution and/or restructuring of Mississippi government. As directed by and subject to the prior approval of the PEER Committee, the Committee's professional staff executes audit and evaluation projects obtaining information and developing options for consideration by the Committee. The PEER Committee releases reports to the Legislature, Governor, Lieutenant Governor, and the agency examined.

The Committee assigns top priority to written requests from individual legislators and legislative committees. The Committee also considers PEER staff proposals and written requests from state officials and others.

An Evaluation of Mississippi's Assistant Reading Instructor Program

December 13, 1994

The PEER Committee

Mississippi Legislature

The Mississippi Legislature

Joint Committee on Performance Evaluation and Expenditure Review

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December 13, 1994

Honorable Kirk Fordice, Governor
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Honorable Tim Ford, Speaker of the House
Members of the Mississippi State Legislature

At its meeting of December 13, 1994, the PEER Committee authorized release of the report entitled **An Evaluation of Mississippi's Assistant Reading Instructor Program.**

Senator Travis Little, Chairman

This report does not recommend increased funding or additional staff.

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An Evaluation of Mississippi's Assistant Reading Instructor Program

Executive Summary

December 13, 1994

Background

The Mississippi Legislature created the Reading Improvement Program in December 1982 as part of a landmark statewide education reform effort known as the Education Reform Act. Also referred to as the Assistant Reading Instructor Program, the Reading Improvement Program sought to improve basic skills acquisition by placing assistant reading instructors in kindergarten through third-grade classrooms.

As of the close of the 1993-94 school year, the state had expended over $340 million on salaries and fringe benefits for assistant reading instructors since the program's implementation in the fall of 1983, and over the five years ending with the close of the 1993-94 school year, local school districts had spent an estimated $18.75 million.

State Department of Education literature distributed when implementation of the program first began described the Reading Improvement Program as a "model for the entire nation. . .having unlimited potential." The department expected the program to achieve the following results:

- *accelerate achievement above the national average (50th percentile);*
- *reduce the percentage of pupils retained in the primary grades (through third grade); and,*
- *decrease the student dropout rate.**

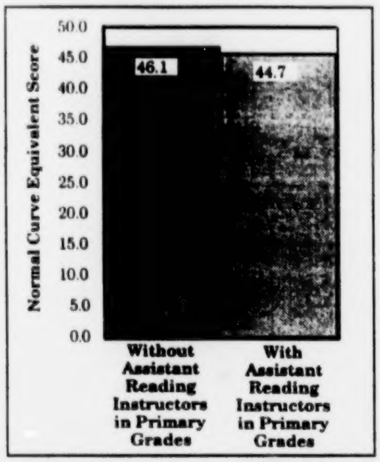
[*Source: undated pamphlet entitled "Mississippi's Reading Improvement Program," produced by the Mississippi State Department of Education]

The Reading Improvement Program Has Not Been Effective

In the eleven years since implementation, the program has achieved none of these results. PEER's review of program effectiveness shows that, on average, students with access to assistant reading instructors scored about the same on standardized reading tests as students without assistant reading instructors (see Exhibit A, below). While PEER found a slight improvement in reading scores for students in extremely low-scoring school districts, these scores, as well as average scores statewide, remained below the program goal of exceeding the national average. Retention rates in the primary grades have remained about the same, while dropout rates have remained constant in the lower grades and increased in the higher grades (see Exhibits B and C on page x).

Exhibit A

Lack of Improvement in Stanford Achievement Test Reading Scores for Mississippi Sixth- and Eighth-Graders

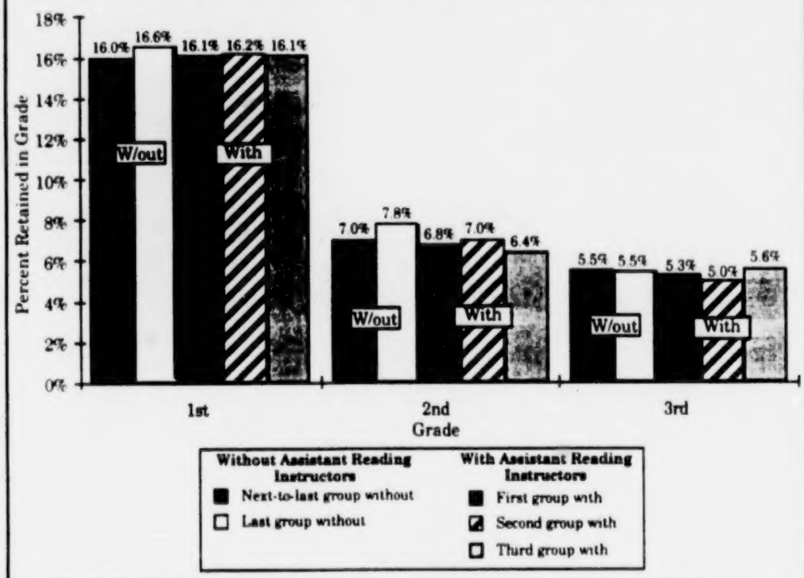


Source: PEER analysis of State Department of Education data.

The dramatic results that reportedly were achieved by the Mississippi school district which piloted the Reading Improvement Program—e.g., an increase in reading scores of 36 percentile points—have not been replicated on a statewide basis. At the time that the Legislature adopted the Reading Improvement Program as a cornerstone

Exhibit B

Lack of Improvement in Student Retention in Primary Grades



SOURCE: PEER analysis of Superintendent's Annual Reports, 1983 through 1987.

of Mississippi's education reform efforts, State Research Associates, a public affairs consulting group, reported to Mississippi's governor: "We believe the use of teacher aides holds greater promise of improving later school achievement than any other single program we could recommend at this time." The obvious question is: what went wrong?

Possible Reasons for the Program's Lack of Effectiveness

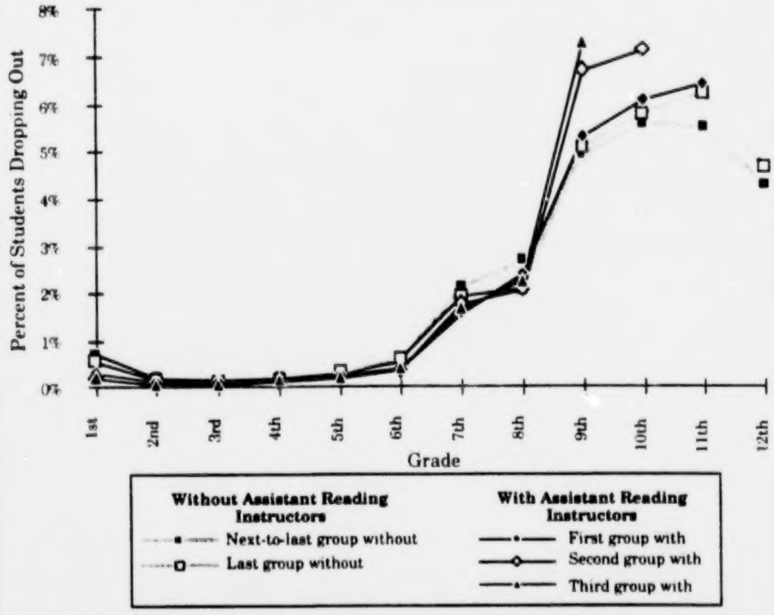
- *Initial expectations for Mississippi's Reading Improvement Program were too great.*

The initial expectation that the statewide Reading Improvement Program had unlimited potential and could even approach effecting a 36 percentile point gain in achievement test scores statewide was based on improper interpretation of test score changes in the district where the program was piloted. Attributing the entire increase (from the 23rd to the 59th percentile) in first-grade reading test scores in Lee County to the presence of assistant reading instructors in the classroom hinged on a misguided assumption.

In fact, many other factors were at work during this period which could partially explain the increase--e.g., reading scores were improving statewide, even in districts without assistant reading instructors, and Lee County's population was changing. The published research on the pilot program only examined changes in test scores during one school year and arrived at a much more moderate conclusion as to the program's effectiveness.

Exhibit C

Lack of Improvement in Dropout Rates



SOURCE: PEER analysis of data in Superintendent's Annual Reports, 1983-1994.

- *Measuring Mississippi's basic skills achievement exclusively by where students score relative to the national average is flawed, as attainment of the* *goal of exceeding the national average is outside of the state's control.*

The outcome on a relative measure such as percentile ranking depends not only on how much better Mississippi students perform, but on how much better or worse students across the country perform. At the same time that Mississippi has been trying to improve its early childhood education efforts, other states have been trying to do the same. For Mississippi to improve its percentile rankings, positive changes in Mississippi student test scores must exceed changes in the scores of other states. For this reason, Mississippi's success should be gauged by an absolute measure, such as percentage of students mastering a given skill, rather than assessing basic skills achievement using only a relative measure such as national ranking.

- *Responsible parties have virtually ignored the Reading Improvement Program law, which contains model accountability provisions.*

The Reading Improvement Program may offer opportunities for success, but only if it is properly implemented. The law establishing the program mandated implementation plans, ongoing program evaluations, and uniform statewide training of both teachers and assistant reading instructors. Program administrators have fulfilled none of these mandates. Without plans, these administrators have not established in operational terms what the program is supposed to accomplish. Without evaluations, the administrators are unable to separate assistant reading instructor classroom practices that work from those that do not and direct program resources accordingly. Without proper training, assistant reading instructors cannot provide the assistance necessary for attaining positive program outcomes. Adequate training is especially critical given that most assistant reading instructors have a high school education and no experience in classroom instruction.

When Mississippi first adopted the Reading Improvement Program, the State Department of Education devoted considerable time and energy to its implementation. The department developed an in-depth orientation program, held regional workshops, and attempted to ensure rigid adherence to all components of the law. However, in the mid-1980s, before the elements were fully executed, the department's support for the program collapsed.

By 1994, the Reading Improvement Program had lost its identity. Assistant reading instructors had become just another classroom resource. While the department continued to issue program guidelines and to provide training to assistant reading instructors and their supervising teachers on an "as requested" basis, the State Department of Education no longer ensured adherence to the program's statutory requirements, including those requirements upon which program funding is contingent.

Summary Questions and Answers Regarding the Reading Improvement Program

How much money has the state spent on the Reading Improvement Program?

During the eleven years of program operation, the state has expended $340,105,672 in Minimum Program funds and an estimated $18.75 million in local school district funds (for the five years for which data was available for PEER to use in estimating local costs).

Has the Reading Improvement Program been effective, especially in improving reading?

No, the program has not been effective in achieving its three primary objectives of increasing standardized test scores above the national average (50th percentile), reducing the percentage of pupils retained in the primary grades, or decreasing the student dropout rate. In fact, since the Reading Improvement Program began, statewide standardized test scores in reading have remained below the national average, the percentage of pupils retained in the primary grades has remained relatively constant, and the student dropout rate has remained constant in the lower grades and increased in the higher grades.

How do districts utilize their assistant reading instructors? Do districts use them as substitute teachers?

Local districts use their assistant reading instructors in a variety of roles, including reinforcement of basic skills and performance of clerical duties. Most of the districts in PEER's district review use the assistants as substitute teachers on a routine basis.

Are relevant parties complying with program statutes?

No, both the State Department of Education and the local school districts have failed to comply with provisions of the Reading Improvement Program law regarding evaluation, program accountability, and training. Further, the state department has not enforced the law's preconditions to program funding.

What is the potential effectiveness of the Reading Improvement Program?

The potential effectiveness of the Reading Improvement Program as implemented is minimal. The concept itself may have potential for improving student achievement, but moving from a promising concept to a program that substantially improves student achievement would require extensive planning, intensive staff training, and continuous monitoring and adjusting at the state and local levels.

Policy Options

While program improvement is one response to the problems described in this report, other options are available to the Legislature. PEER offers the following four policy options:

- Make the Reading Improvement Program work as originally intended by requiring the responsible parties to comply with all provisions of the Reading Improvement Program law;
- Convert the Reading Improvement Program into a Teacher's Aide program;
- Divert the money used for the Reading Improvement Program to other educational programs; or,
- Abolish the Reading Improvement Program and redirect the funds to the state General Fund or reduce taxes accordingly.

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An Evaluation of Mississippi's Assistant Reading Instructor Program

Introduction

The Mississippi Legislature created the Reading Improvement Program in December 1982 as part of a landmark statewide education reform effort known as the Education Reform Act. Also referred to as the Assistant Reading Instructor Program, the Reading Improvement Program sought to improve basic skills acquisition in early childhood by placing assistant reading instructors in kindergarten through third-grade classrooms.

Authority

In response to a legislative request, the PEER Committee reviewed the effectiveness of Mississippi's Reading Improvement Program. The PEER Committee acted in accordance with MISS. CODE ANN. Section 5-3-57.

Purpose and Scope of Evaluation

At the end of the 1993-94 school year, the state had spent $340,105,672 in Minimum Program funds on salaries and fringe benefits for assistant reading instructors since the 1983-84 school year, the year that implementation of Mississippi's Reading Improvement Program began. Over the five years ending with the close of the 1993-94 school year, the only period for which salary data was available in computerized format from which PEER could estimate local costs, local districts spent $18.75 million on assistant reading instructors' salaries, excluding fringe benefits.

Concerned whether this large expenditure of public funds was yielding intended program benefits, the requesting legislator posed the following specific questions relative to the state's Reading Improvement Program:

- Exactly how much money has been spent on the Reading Improvement Program?
- Has the Reading Improvement Program been effective, especially in improving reading?
- How are districts utilizing their Assistant Reading Instructors? Are districts using them as substitute teachers?

- Are relevant parties complying with program statutes?
- What is the potential effectiveness of the program?

The purpose of PEER's evaluation was to answer these questions by conducting an independent evaluation of the program.

Externally Imposed Scope Limitations

The State Department of Education has failed to maintain historical program records and both the department and local school districts have failed to evaluate the Reading Improvement Program's effectiveness on an ongoing basis *as required by law*. This lack of documentation and data greatly hampered PEER's efforts in evaluation. Only one departmentally sponsored statewide study of the program's effectiveness exists. Further, critical documentation is missing related to the limited reviews that have been conducted on the program. (For example, the State Department of Education was unable to locate a copy of a 1986 evaluation report funded by the department, nor could the department provide the data researchers analyzed in preparing the 1986 evaluation report.) While PEER was able to locate some historical documents through sources external to the department, a complete set of Reading Improvement Program documents (e.g., program guidelines, evaluations, correspondence, training materials) no longer exists. In other project areas, PEER could not document local costs of the program since inception because salary data from which PEER could estimate local costs was only available for the past five years in computerized format.

Method

To obtain cost data for the Reading Improvement Program, PEER reviewed Legislative Budget Reports since FY 1985, interviewed staff of the Legislative Budget Office, and obtained available local cost data from State Department of Education personnel computer tapes.

PEER analysts measured program effectiveness using standardized test data and reports of retention and dropout rates available through the State Department of Education. PEER also reviewed all available evaluations of the program's effectiveness, specifically:

- the two evaluation reports on a pilot program conducted prior to statewide program implementation;
- the 1986 State Department of Education-sponsored study of the statewide program's effectiveness; and,

- the independent program research presented at the 1994 Annual Meeting of the Eastern Educational Research Association.

To analyze assistant reading instructor utilization and legal compliance of the program, PEER:

- interviewed current and former State Department of Education personnel involved with the Reading Improvement Program;

- reviewed available program documents, including Board of Education minutes, Reading Improvement Program guidelines and regulations, and enabling legislation; and,

- conducted an on-site inspection of the program's implementation in eight districts selected by a purposive sample based on standardized test performance, before and after implementation of the Reading Improvement Program. In each district, PEER reviewed program documents and personnel files. PEER also interviewed the program supervisors as well as a sample of assistant reading instructors and their supervising teachers. (Appendix A on page 57 contains a more detailed description of PEER's district review.)

To assess the effectiveness of the program as implemented, PEER analyzed critical prerequisites to program success, such as whether assistant reading instructors are properly trained and whether program administrators have established measurable program objectives and monitored the effectiveness of the program on an ongoing basis.

Overview

- **Exactly how much money has been spent on the Reading Improvement Program?**

From inception of the program in the 1983-84 school year through the close of the 1993-94 school year, the state has expended $340,105,672 in Minimum Program funds on salaries and fringe benefits for assistant reading instructors. Over the five years ending with the close of the 1993-94 school year, for which period salary data was available in computerized format, local districts spent an estimated $18.75 million on assistant reading instructor salaries, excluding fringe benefits.

- **Has the Reading Improvement Program been effective, especially in improving reading?**

The Reading Improvement Program has not been effective as implemented.

- **Do assistant reading instructors perform the activities in the classroom that they are supposed to perform?**
- **Do districts use assistant reading instructors as substitute teachers?**

Local districts use their assistant reading instructors in a variety of roles, including reinforcement of basic skills and performance of clerical duties. Most of the districts in PEER's district review used the assistants as substitute teachers on a routine basis.

- **Are relevant parties complying with program statutes?**

The State Department of Education and the local districts have failed to comply with provisions of the Reading Improvement Program law.

- **What is the potential effectiveness of the Reading Improvement Program?**

The potential effectiveness of the Reading Improvement Program as implemented is minimal. The concept itself may have potential for improving student achievement, but moving from a promising concept to a program that substantially improves student achievement would require extensive planning, intensive staff training, and continuous monitoring and adjusting at the state and local levels.

Background

Origin of the Reading Improvement Program

Mississippi's Reading Improvement Program originated as an experiment funded by a private entrepreneur interested in improving the state through its educational system. Frustrated by the state's repeated failures to adopt publicly funded kindergarten during the 1970s, George McLean, a Tupelo newspaper publisher, began searching for a viable alternative to kindergarten that would serve the same purpose of bolstering early childhood education in Mississippi. In the fall of 1976, he proposed a pilot program, funded entirely with private funds, including a substantial personal donation, to test whether placing paraprofessional assistant reading instructors in first-grade classrooms was an effective method of improving basic skills acquisition.

Believing that reading is the foundation for learning, Mr. McLean proposed that these assistants be placed in the classroom under the direction of classroom teachers to help ensure student mastery of basic skills by:

- reducing the pupil/instructor ratio;
- promoting individual and small group instruction; and,
- increasing time spent on learning tasks.

Mr. McLean chose his own county, Lee County, as an ideal pilot district given that the county was rural, relatively poor, and had a history of poor reading achievement (e.g., during the 1975-76 school year, Lee County's first-graders' average reading scores ranked at the 23rd percentile nationally).

In the pilot program, the assistant reading instructors were required to have high school diplomas as well as reading, writing, speaking, and interpersonal skills. The primary assignment of the assistants was to strengthen and enrich the children's basic skills instruction. These paraprofessionals were different from traditional classroom aides who had been used in public school classrooms to perform clerical activities for teachers--such as grading papers and making copies--in that the assistant reading instructors were to provide direct instructional assistance to the children. The assistants also differed from most federal program aides, such as those hired under Chapter 1 (refer to Appendix B, page 58, for a brief discussion of the Chapter 1 program) in that most of the assistants would work in the same classroom all day with all students to reinforce skills and lessons taught by the teacher and to supplement basic skills instruction, rather than working only with low-achieving students. After two years, Mr. McLean expanded the pilot program to include the second grade.

In 1982, researchers evaluated the effectiveness of the pilot program and concluded that it was a success. Appendix C on page 59 contains an in-depth discussion of their research findings.

Establishment and Purpose of Mississippi's Reading Improvement Program

Based on the reported success of the Lee County pilot program, the Legislature created the Reading Improvement Program to "provide an early childhood education program that assists in the instruction of basic skills" during a special session held in December 1982.* The program, which was one component of a larger package of legislation referred to as the Education Reform Act (Chapter 17, *Laws of 1982*), hinged on the hiring of assistant reading instructors in the first through third grades (the Legislature later added the option of placing assistant reading instructors in kindergarten classrooms) to "assist pupils in actual instruction under the strict supervision of a certified teacher."

The Reading Improvement Program, like many other elements of the 1982 Education Reform Act, was promoted on the belief that directing resources to early childhood education would yield significant long-term educational and societal benefits. The theory was that improvements in skills acquired in the early years would translate into improvements in knowledge acquired at all subsequent grade levels, and that these improvements would result in improved standardized test scores throughout the academic years of each student who had participated in the early childhood education reform programs.

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*A promotional brochure developed for a reading aide pilot project in Lee County, Mississippi, described basic skills as "reading, writing, and arithmetic." Page 16 of this report contains a more detailed discussion of the program's purpose.

Statewide Implementation of the Reading Improvement Program

Organization Structure

MISS. CODE ANN. Section 37-21-7 (1972) places requirements on both the State Department of Education and local school districts for administration of the Reading Improvement Program. (Appendices D and E on pages 67 and 69 contain copies of the Reading Improvement Program law and current program regulations as developed by the State Department of Education.) The State Superintendent of Education has assigned primary Reading Improvement Program responsibility to one individual, the Department of Education's Reading (K-12)/Early Childhood Director (refer to Exhibit 1 on page 8.)

At the district level, the law requires each school district to "designate the necessary personnel to supervise and report on their program." The Department of Education's program coordinator said that program responsibility varies from district to district. Of the school districts included in PEER's district review, most assigned Reading Improvement Program responsibility to elementary school principals.

Distribution of Assistant Reading Instructors

The Reading Improvement Program's enabling legislation called for a three-year statewide implementation of the Reading Improvement Program, according to the following schedule:

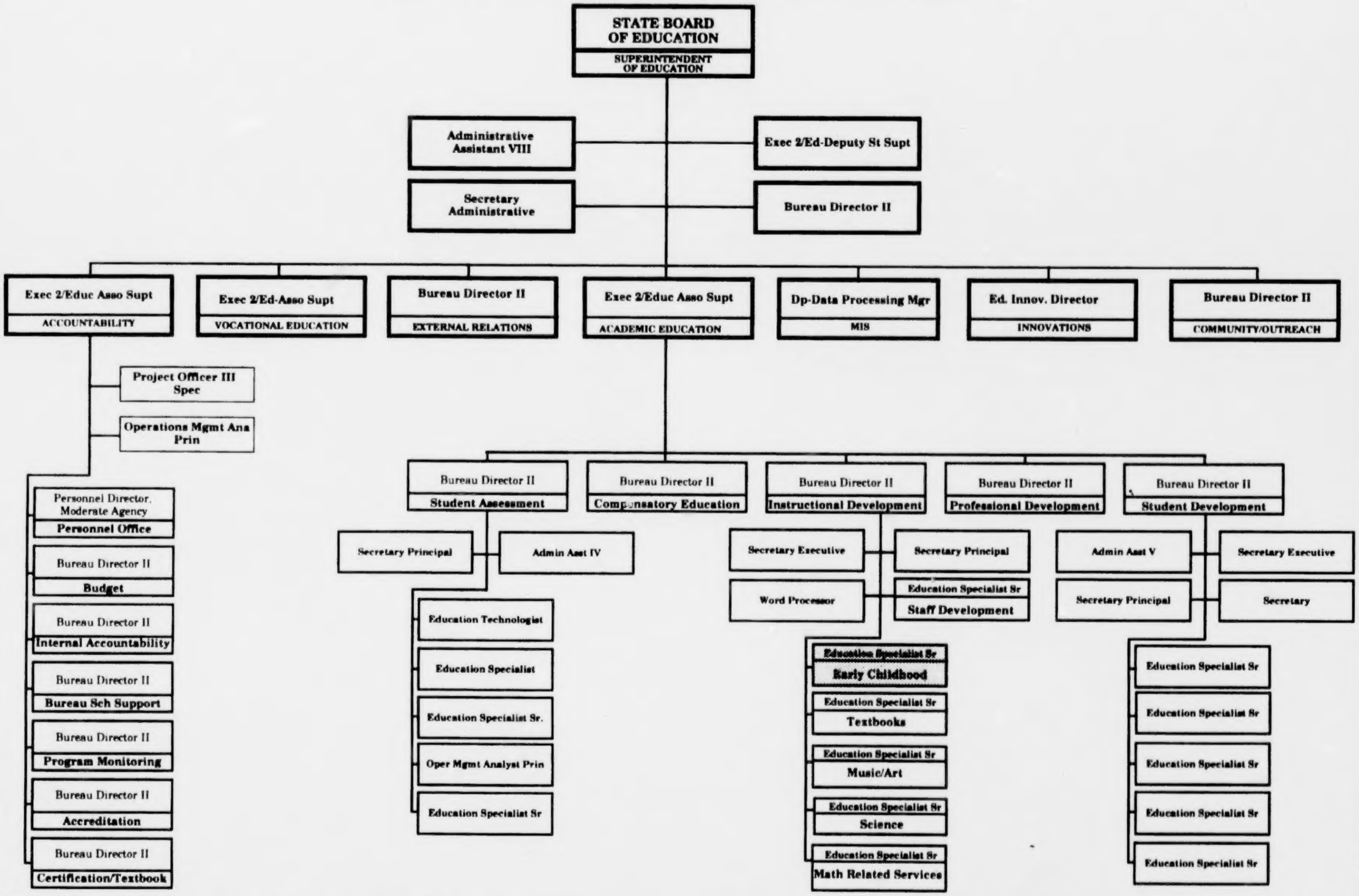
School Year	Grades With Assistant Reading Instructors
1983-84	1st
1984-85	1st and 2nd
1985-86	1st, 2nd, and 3rd

(Appendix F on page 72 contains the implementation schedule for all requirements of the Education Reform Act, including the Reading Improvement Program which is shown as Mandated Program Requirement 15.)

The law authorized one assistant reading instructor for each teacher unit in these grades. During its 1986 Session, the Legislature amended the law to include kindergarten in the grades where districts could place assistant reading instructors, but did not provide for an increase in the state-funded allocation of assistant reading instructors, instead granting each district's superintendent the discretion to distribute the assistants between grades kindergarten through three so as to "promote the maximum efficiency in instruction."

Exhibit 1

State Department of Education Organization Chart



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Bureau Director II
Professional Development
Bureau Director II
Student Development
Secretary Principal
Admin Asst IV
Education Technologist
Education Specialist
Education Specialist Sr.
Oper Mgmt Analyst Prin
Education Specialist Sr
Secretary Executive
Secretary Principal
Word Processor
Education Specialist Sr
Staff Development
Education Specialist Sr
Early Childhood
Education Specialist Sr
Textbooks
Education Specialist Sr
Music/Art
Education Specialist Sr
Science
Education Specialist Sr
Math Related Services
Admin Asst V
Secretary Executive
Secretary Principal
Secretary
Education Specialist Sr
Education Specialist Sr
Education Specialist Sr
Education Specialist Sr
Education Specialist Sr

▨ Denotes program responsibility for the Assistant Reading Instructor Program

SOURCE: Compiled by PEER staff from fiscal year 1995 State Personnel Board organization charts and other SDE information.

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In its 1993 *Mississippi Reading Improvement Program Regulations*, the State Department of Education addresses the law's "maximum efficiency" requirement by mandating that all kindergarten and first grade assistant reading instructors be assigned to only one class. By implication, this regulation permits districts to assign second- and third-grade assistant reading instructors to more than one class.

As shown in Exhibit 2, page 10, for school years 1989-90 through 1993-94, districts have concentrated their assistants in the lower grades, specifically assigning 87% of them to grades K-2 during the 1993-94 school year.

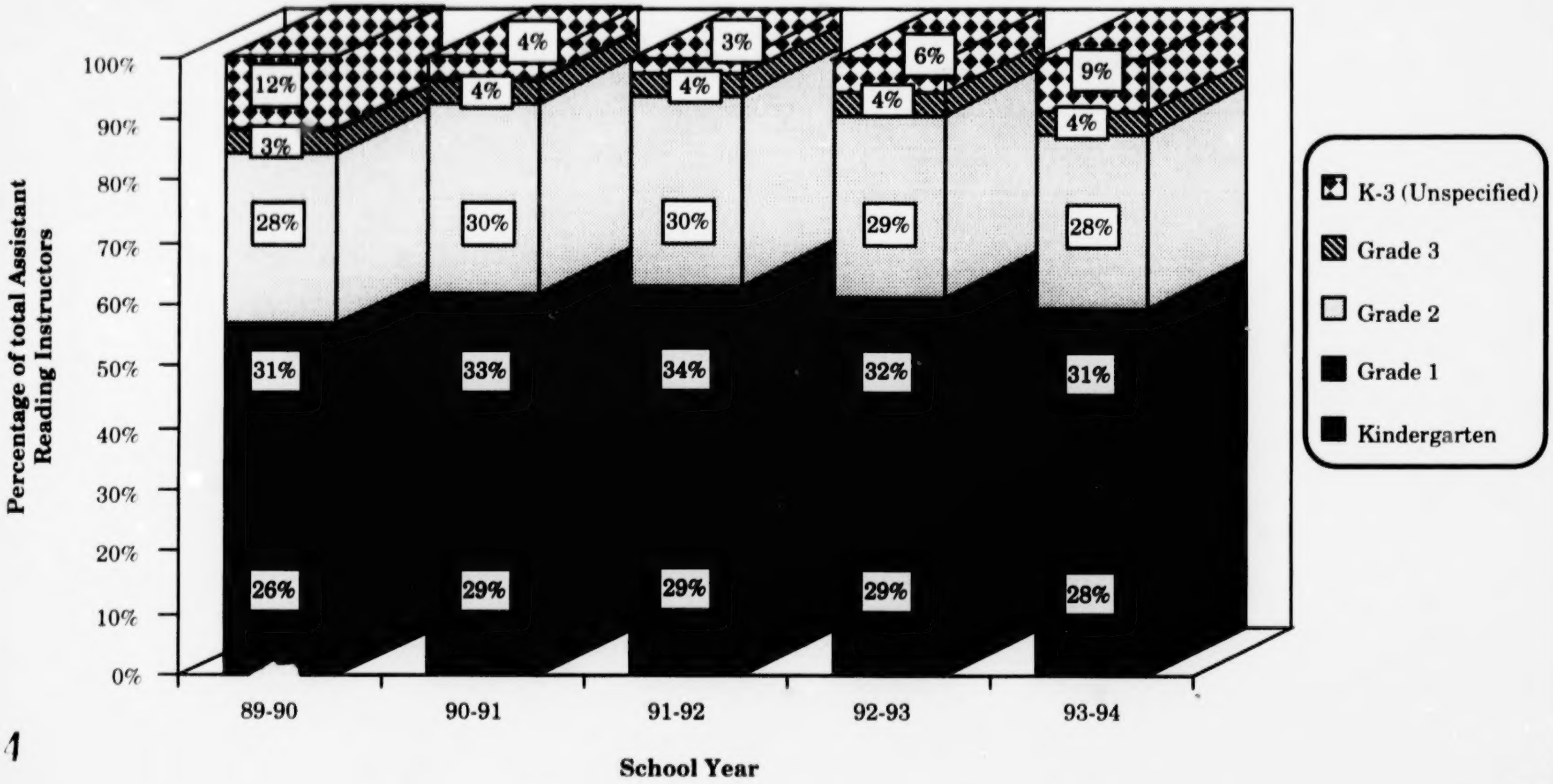
Profile of Assistant Reading Instructors Today

Local school districts employed 4,774 assistant reading instructors in the 1993-94 school year, over 99% of whom were female with an average of 5.1 years of experience (increasing from a statewide average of 4.1 years in the 1989-90 school year). Appendix G on page 74 profiles each district's assistant reading instructors for school years 1989-90 through 1993-94, showing percent male/female, years of experience, and turnover rates.

Of the eighteen assistant reading instructors PEER interviewed during its district review, fifteen (83%) had a high school education (including one GED certificate), two had associate degrees, and one had a four-year college degree.

Exhibit 2

Assistant Reading Instructors, By Grade
School Years 1990-1994



SOURCE: PEER analysis of data provided by school districts to State Department of Education.

Program Cost

- **Exactly how much money has been spent on the Reading Improvement Program?**

From inception of the program in the 1983-84 school year through the close of the 1993-94 school year, the state has expended $340,105,672 in Minimum Program funds on salaries and fringe benefits for assistant reading instructors. Over the five years ending with the close of the 1993-94 school year, for which period salary data was available in computerized format, local districts spent an estimated $18.75 million on assistant reading instructor salaries, excluding fringe benefits.

Funding History of the Reading Improvement Program

The Education Reform Act of 1982 authorized the State Department of Education to allot to each school district $5,500 in state Minimum Foundation Program funds per authorized assistant reading instructor. (Appendix H on page 80 contains a brief description of the state's Minimum Foundation Program.) Some districts supplement the state-funded assistant reading instructor salaries with local funds.

Since inception of the Reading Improvement Program, the Legislature has increased the salary allotment for assistant reading instructors as follows:

Year Authorized	Amount of State Allotment Per Assistant Reading Instructor
1982 (year of passage)	$5,500
1988	6,100
1993 (current level under CODE Section 37-21-7)	6,700
1994 ($800 annual increase under Senate Bill 3380)	7,500

In 1994, the Legislature passed a bill (Chapter 581, *Laws of 1994*) providing that no district would be eligible to receive Minimum Program funds under the Reading Improvement Program if a district's local supplement to assistant reading instructors' salaries is less than that contributed the previous year--i.e., a measure prohibiting a local school district from using an increase in state funds to supplant a portion of the local supplement to the assistant reading instructor's salary. Chapter 615, *Laws of 1994*, provides for Minimum Program funds to pay for health insurance costs for all school district employees who work twenty or more hours per week. The Legislative Budget Office estimates that FY 1995 health insurance costs for assistant reading instructors will total $1,608 annually per assistant. Applying this increase to the assistant reading instructors appropriated for FY 1995, the estimated health insurance cost for assistant reading instructors for FY 1995 is $7,694,280. The total FY 1995 appropriation for assistant reading instructors, including health insurance costs, is $49,351,241.

Total Salary Costs of the Reading Improvement Program for the 1993-1994 School Year

State Costs

As noted above and shown in Exhibit 3 on page 13, the state expended $340,105,672 in Minimum Program funds on assistant reading instructors' salaries and fringe benefits from program inception through the close of the 1993-94 school year. Costs have increased from $10,515,703 in appropriations for 1,693 assistants in the program's first year of operation to $37,071,846 for 4,774 reading assistants in the 1993-94 school year.

PEER estimated the per-student Minimum Program salary and fringe benefit costs of assistant reading instructors in FY 1994 to be $308, based on an estimated 120,375 students being served by the assistants in kindergarten through third grade. Appendix I on page 81 describes the method PEER used to arrive at the estimated number of students served.

Local Costs

PEER estimated the locally funded salary costs of assistant reading instructors over the five-year period ending with the close of the 1993-94 school year to be $18.75 million, excluding fringe benefits. Appendix J on page 82 discusses the method that PEER used to arrive at this figure.

As shown in Exhibit 4 on page 14, during the 1993-94 school year, local school district salary supplements excluding fringe benefits for assistant reading instructors ranged from no local supplements (nine districts) to more than $2,500 per full-time equivalent assistant reading instructor (two districts). Adding these local supplements to the state allotments district average, assistant reading instructors' salaries ranged from $6,700 to $13,826 excluding local fringe benefits during the 1993-94 school year. (Appendix K on page 84 contains a district-by-district breakdown.) Twenty-four school districts fell into the largest category of districts--i.e., those providing between $1,000 and $2,500 in local funds per full-time equivalent assistant reading instructor.

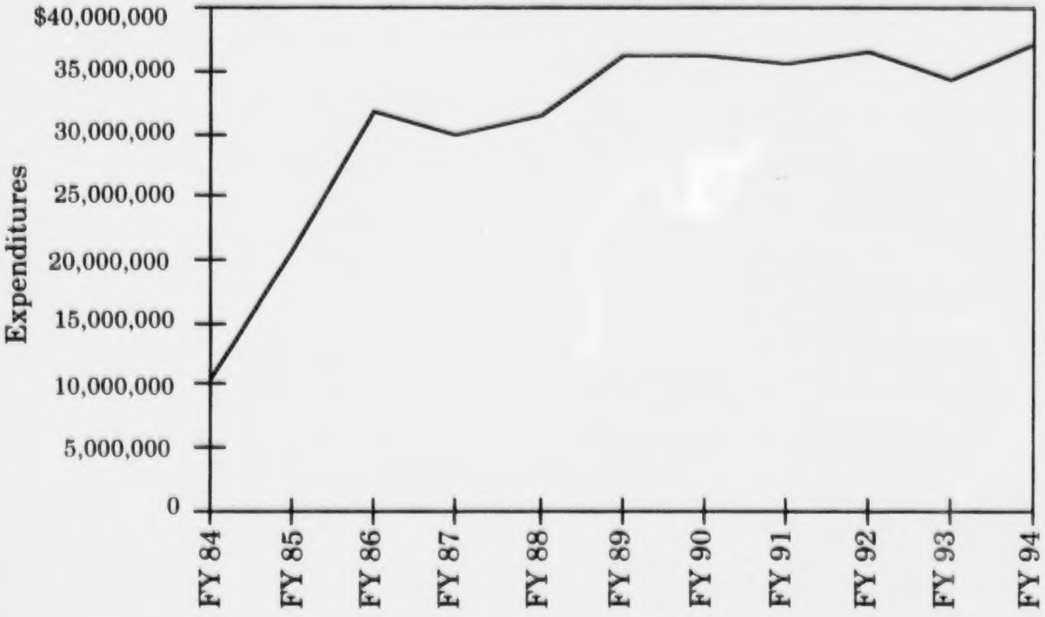
Potential Increase in Minimum Program Costs for Kindergarten Teacher Units

While teacher units in grades 1 through 3 are funded at the same level as they were prior to implementation of the Reading Improvement

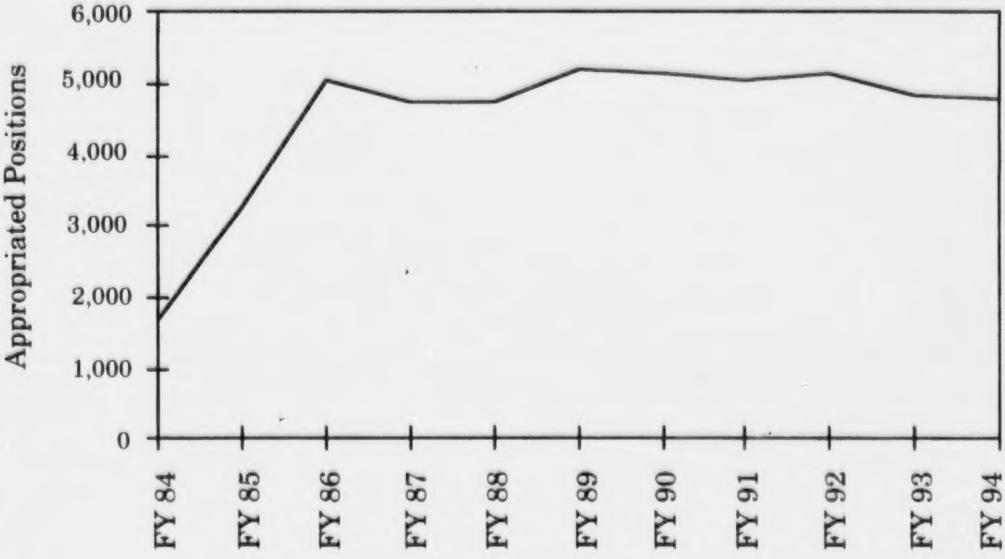
Exhibit 3

Assistant Reading Instructor State Fund Expenditures and State Funded Assistant Reading Instructor Positions, Fiscal Years 1984-1994

State Fund Expenditures



State Funded Assistant Reading Instructor Positions

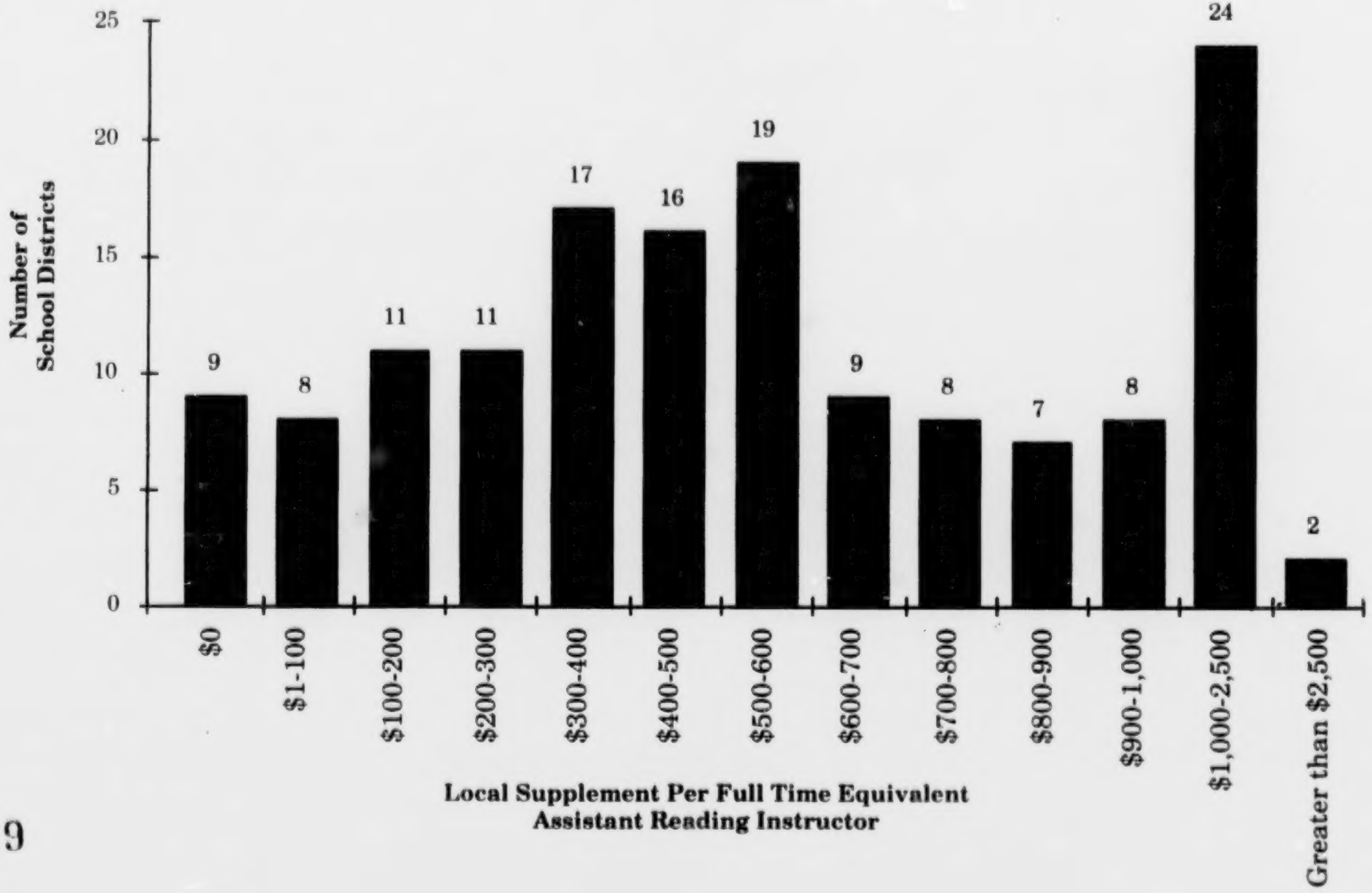


NOTE: FY 89-94 data reflects actual expenditures as documented in Legislative Budget Office records. Data for other years reflects appropriated positions and expenditures.

SOURCE: Legislative Budget Office documents and Legislative Budget Reports, Fiscal Years 1985-95.

Exhibit 4

Frequency Distribution of Local Salary Supplement Assistant Reading Instructors' Salary 1994 School Year



SOURCE: PEER Analysis of State Department of Education records.

Program (i.e., 24:1), PEER believes that the Legislature would have funded kindergarten teacher units at a ratio lower than 24:1 had the Reading Improvement Program not been in place at the time that the state's public kindergarten program began. Assuming that the Legislature would have funded kindergarten teacher units at a ratio of 20:1 had it not established the Reading Improvement Program, for the 1993-94 school year alone, the state would have incurred an additional $6.9 million in Minimum Program costs for kindergarten teacher salaries and fringe benefits and $1.1 million for support service costs for these teachers, for a total increase of $8 million in Minimum Program costs to support the smaller kindergarten class size. Therefore, should the Legislature choose not to continue the assistant reading instructor program, projected savings in terms of assistant reading instructor salaries and fringe benefits would have to be offset by the cost of the increase in the number of teacher units needed to serve kindergarten children.

Program Effectiveness

- **Has the Reading Improvement Program been effective, especially in improving reading?**

The Reading Improvement Program has not been effective as implemented.

Purpose of the Reading Improvement Program

According to law, the purpose of the Reading Improvement Program is to "provide an early childhood education program that assists in the instruction of basic skills" (MISS. CODE ANN. Section 37-21-7[2][a]). Because the name of the program and the position it created focus on reading (i.e., Reading Improvement Program, Assistant Reading Instructors), the program's primary emphasis and its major area of impact should be on students' reading achievement. However, the program's enabling legislation also mentions a broader purpose: improving instruction in basic skills. Therefore, an assessment of the program's effectiveness also should include a review of the program's impact on mathematics and language achievement in addition to a review of reading achievement.

In its first published guidelines for the Reading Improvement Program (April 1983), the State Department of Education's Division of Instruction explained the program's purpose as follows:

> The effectiveness of an assistant teacher in the classroom has been demonstrated as a successful approach for increasing the basic skills capabilities of primary level students. Whereas the primary focus of this program is centered upon increasing the level of student performance in the reading skills areas, the assistant teacher should be an instructional resource in all the basic skills areas.

In a promotional pamphlet released after passage of the Education Reform Act, the State Department of Education's Division of Instruction addressed the intended outcomes of the Reading Improvement Program, stating that it was designed to:

1. Accelerate achievement above the national average,
2. Reduce the percentage of pupils retained in the primary grades and
3. Decrease the student dropout rate.

In the "Results" section of the same pamphlet, the Department of Education described a 36-percentile-point increase in Lee County's first-grade reading scores and a 19-percentile-point increase in achievement in Tupelo, another district that began using assistant reading instructors before the Legislature funded a statewide program. The Lee County and Tupelo data and several endorsements quoted in that pamphlet illustrate the climate of enthusiasm surrounding the education reform movement of the early 1980s. The assistant reading instructor program was one of several whose purpose was to deliver the substantial improvement in achievement that was the promise of education reform.

State Department of Education's Response to PEER's Request for Effectiveness Data

When PEER requested copies of the State Department of Education's annual evaluations of the program through the use of an acceptable standardized testing system as required by law, the department responded that "Mississippi's Statewide Testing Program serves as Mississippi's education assessment" and provided a copy of the department's Mississippi Statewide Testing Program Summary Report for 1994. (See page 44 for a discussion of why this is not sufficient to meet the legal requirement for an annual evaluation of the program.)

Despite the insufficiency of statewide testing program data as an annual program evaluation, the data provided by the State Department of Education provided information relative to student performance in reading. The State Department of Education found that in 1994, Mississippi's scores for fourth-, sixth-, and eighth-graders improved in mathematics and language, but reading scores remained relatively low. The department recommended examining the reading curriculum and reading instruction at all three grade levels.

Analysis of Effectiveness

PEER examined test score data, retention rates, and dropout rates to determine whether the presence of assistant reading instructors improved student performance on the Stanford Achievement Test, increased rates of promotion to the next grade, and decreased dropout rates. In each area, PEER compared the performance of groups that participated in the Reading Improvement Program with the performance of those who did not. Also, because program designers expected the program to raise test scores above the national average, PEER compared Mississippi students' averages to the national average to determine whether students who were taught by assistant reading instructors during their primary years achieved this goal. See Appendix L, page 90, for information on design considerations and on the performance data PEER used in these comparisons.

Achievement Test Scores

- *Reading achievement in low-scoring districts has improved slightly, but statewide average reading scores for students who had assistant* *reading instructors in their primary years were about the same as those of students who did not have assistant reading instructors.*

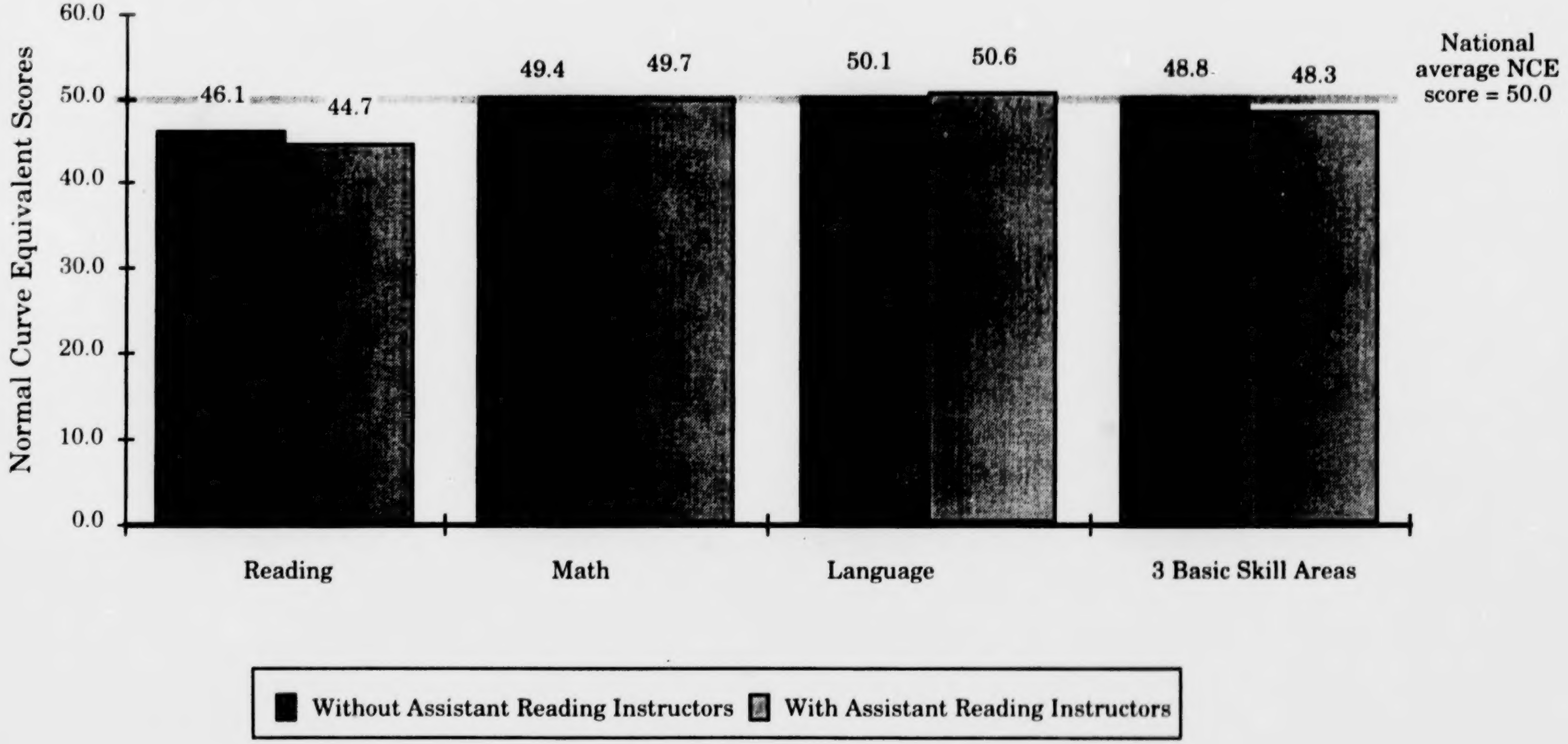
Overall, groups of students who were taught by teams of teachers and assistant reading instructors scored about the same as groups who did not have assistant reading instructors in their primary years. Exhibit 5, page 19, compares average scores of sixth- and eighth-graders who were not taught by assistant reading instructors with sixth- and eighth-graders who had assistant reading instructors in their classrooms during their primary years. Although reading achievement did not improve for the average Mississippi student, PEER found that achievement in districts with extremely low-scoring eighth-graders who did not have assistant reading instructors (1990 eighth-graders) improved slightly when classes that had been served by the assistant reading instructor program reached that grade level (1991-1993 eighth-graders). (See Appendix M, page 92, for a district breakdown of the differences between eighth-grade Stanford Achievement Test reading scores of students without and with assistant reading instructors in their primary years.)

On average, reading scores of sixth- and eighth-grade students taught by assistant reading instructors were about the same as those of students who did not have assistant reading instructors in their primary years. As Exhibit 5, page 19, shows, students with assistant reading instructors scored about the same in reading as those who did not participate in the program (44.7 with assistant reading instructors compared to 46.1 without assistant reading instructors). Mathematics and language scores also were about the same for program participants and non-participants. In mathematics, the average scores of students with assistant reading instructors was 49.7 while the average scores of those without assistant reading instructors was 49.4. The average language score for students without assistant reading instructors was 50.1, while the average score for students with assistant reading instructors was 50.6. Appendix N, page 102, contains a table showing the data used in this comparison.

Reading scores of students in low-achieving districts improved slightly. Although PEER found no statewide improvement in average reading scores with the introduction of assistant reading instructors, Exhibit 6, page 20, shows that some difference can be detected in the reading performance of students in the lowest-scoring districts. PEER divided Mississippi's school districts into four groups, based on the average reading achievement of their 1990 eighth-graders (the last group that did not have assistant reading instructors in their primary years). For each group, PEER averaged the difference between the scores of eighth-graders who did not have assistant reading instructors (1990 eighth-graders) and those who did (1991, 1992, and 1993 eighth-graders). On average, districts

Exhibit 5

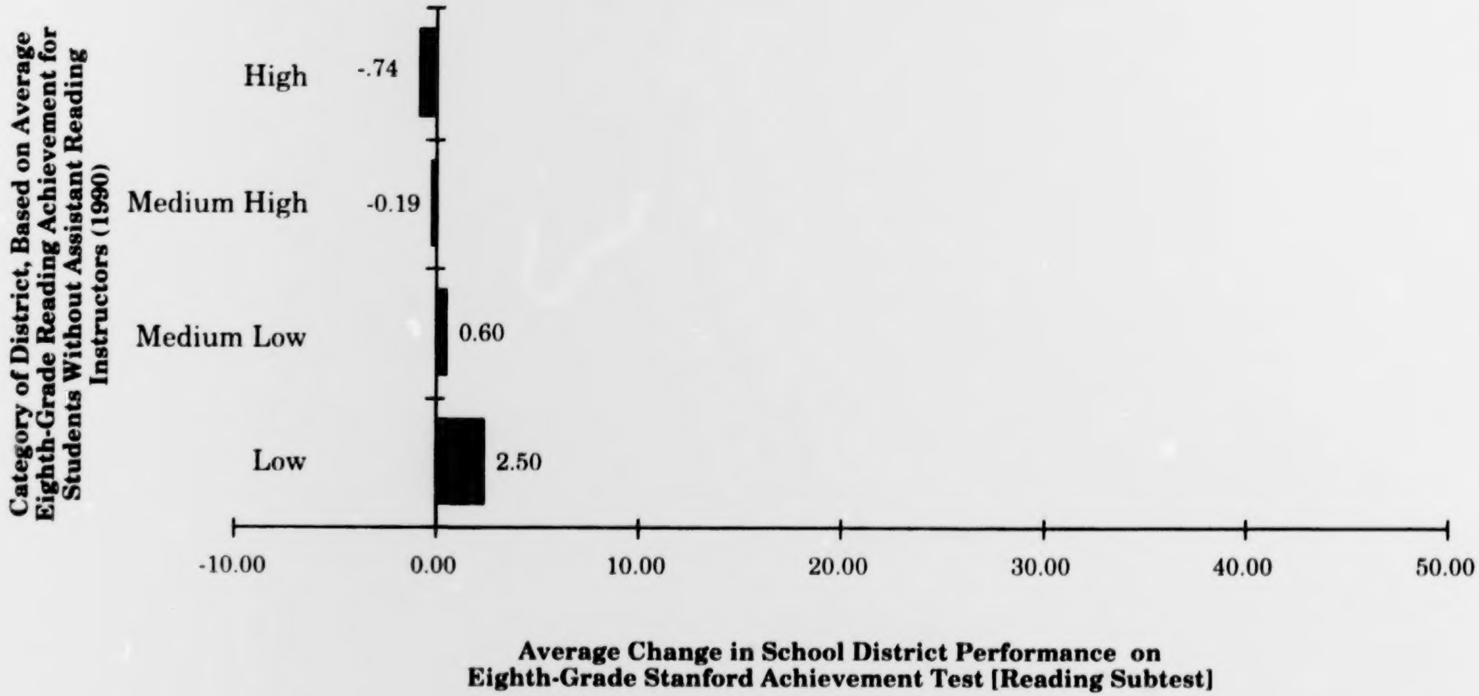
Average Stanford Achievement Test Scores of Sixth- and Eighth-Graders Without and With Assistant Reading Instructors in the Classroom During Their Primary Years



SOURCE: PEER analysis of State Department of Education data (normal curve equivalent scores, 1988-1992).

Exhibit 6

Average School District Change in Reading Achievement (Scores of Students With Assistant Reading Instructors Minus Scores of Students Without Program) Grouped by Average District Performance Without Assistant Reading Instructors



SOURCE: PEER analysis of statewide testing data.

with the lowest achievement before the introduction of assistant reading instructors improved the most. The weighted average reading achievement of eighth-graders in the lowest one-fourth of all Mississippi school districts was 2.5 score units higher for students who had assistant reading instructors in their primary years (1991, 1992, and 1993 eighth-graders) in comparison with the scores of 1990 eighth-graders, who did not have assistant reading instructors. As Exhibit 6, page 20 shows, the lower the district's original performance (without assistant reading instructors), the better that district did, on average, after assistant reading instructors were introduced.

This 2.5-point (7%) increase in achievement among the state's lowest-scoring districts, however, is small when considered in terms of the national average. This score gain only raised the average low-achieving school district (the average district among the lower one-fourth of all Mississippi school districts) from about the 22nd percentile to the 25th percentile nationally.

Further, the presence of assistant reading instructors cannot be identified as the cause of this improvement among low-achieving districts because it is possible that other factors could explain some or all of the difference in achievement. For example, the districts with lower scores prior to the program may have improved their Chapter 1 programs during the same period, causing the eighth-grade achievement gain noted above. However, the difference in reading score improvement among eighth-graders in low-scoring districts suggests that the potential of the assistant reading instructor program for improving students' reading achievement may be greater in districts with exceptionally low performance.

On average, Mississippi's reading scores are lower than the national average. The data used to compare the achievement of sixth- and eighth-graders with and without assistant reading instructors (Exhibit 5, page 19) also demonstrates that test scores have remained below the national average following implementation of the assistant reading instructor program. Fourth-graders' reading achievement, like that of sixth- and eighth-graders, has consistently fallen short of the national average (42nd percentile compared to the targeted 50th percentile).

Fourth-grade scores in math and language have improved substantially in recent years. In comparing the achievement of students with and without the assistant reading instructor program, PEER used data from the statewide administration of the Stanford Achievement Test, the only nationally normed, standardized reading test administered consistently after implementation of the Reading Improvement Program. This testing program began too late to include any fourth-graders who did not have assistant reading instructors in their primary years. With no "without program" fourth-grade data available for comparison, PEER limited its fourth-grade analysis to reviewing the achievement of fourth-graders who participated in the assistant reading instructor program. Appendix N (Table 2, page 103) and Appendix O, page 104, provide this information, as well as data and graphs for sixth- and eighth-graders.

Note that fourth-graders have shown considerable improvement in mathematics (58th percentile) and language (56th percentile) in recent years. Fourth-grade test scores after 1989 reflect full implementation of the 1982 Education Reform Act, including the kindergarten program. Because fourth-graders received the benefit of multiple programs, score increases among fourth-graders after 1989 cannot be attributed specifically to the assistant reading instructor program and these scores are not included in the comparison described above and illustrated in Exhibit 5, page 19.

- *The choice of measuring Mississippi's performance in relation to the national average is flawed, as attainment of the goal of exceeding the national average is outside of the state's control.*

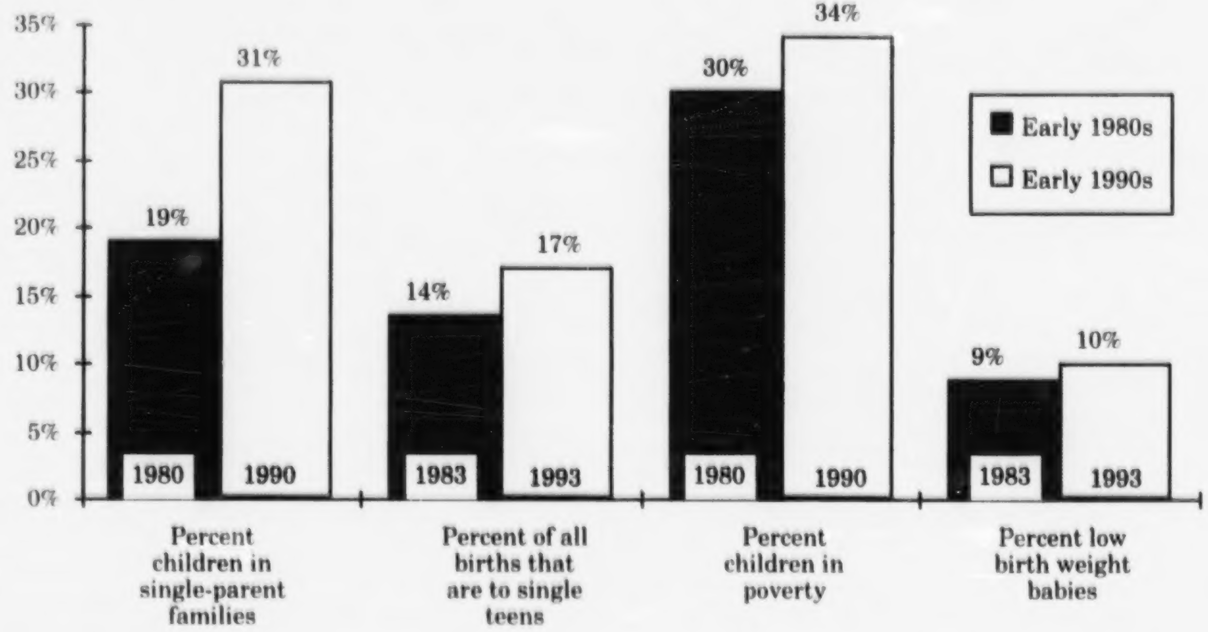
The outcome on a relative measure such as percentile ranking depends not only on how much better Mississippi students perform, but on how much better or worse students across the country perform. It is reasonable to assume that at the same time that Mississippi has been trying to improve its early childhood education efforts, other states have been trying to do the same. For Mississippi to improve its percentile rankings, positive changes in Mississippi student test scores must exceed changes in the scores of other states. For this reason, it makes more sense to gauge Mississippi's success by an absolute measure, such as percentage of students mastering a given skill, rather than tying program success to a relative measure such as national ranking.

- *National trends in reading achievement do not support the notion that Mississippi's scores would have declined if the Reading Improvement Program had not been established.*

Despite the program's failure to meet original expectations, some argue that it has been successful in preventing statewide standardized test scores from dropping as much as they would have without it. This line of reasoning contends that over the program's history, students are coming to school increasingly less prepared to learn. There is some validity to this argument, as the percentage of Mississippi children falling into various "high-risk" categories (e.g., percentage of children in poverty, percentage of low-birth-weight babies) has increased. (See Exhibit 7, page 23, for changes in family resources and other indicators of children's well-being in Mississippi). Other states have experienced similar increases in the incidence of risk. If reading achievement in other states had declined, one might have assumed that Mississippi's eighth-grade achievement patterns would have declined as well, instead of remaining relatively stable, as

Exhibit 7

Changes in Family Resources and Other Indicators of Children's Well-Being, Mississippi, Early 1980s to Early 1990s



SOURCE: Kids Count Mississippi 1994 Data Book.

shown in Appendix N, page 102. Nationally, however, the reading achievement of thirteen-year-olds enrolled in public schools remained essentially the same from 1980 through 1992. The stability of eighth-graders' scores nationally casts doubt on the notion that Mississippi's scores would have declined without the assistant reading instructor program.

By failing to evaluate the assistant reading instructor program routinely in a way that controls for these societal changes and other outside factors, neither the State Department of Education nor the local school districts can support claims that the assistant reading instructor program or any other program is responsible for preventing declines in achievement. Also, by not monitoring program effectiveness in accordance with the law, the State Department of Education and local school districts cannot know how to utilize the assistant reading instructors to meet changing student needs most effectively.

Retention Rates

- *Retention rates in primary grades have remained about the same since the introduction of assistant reading instructors.*

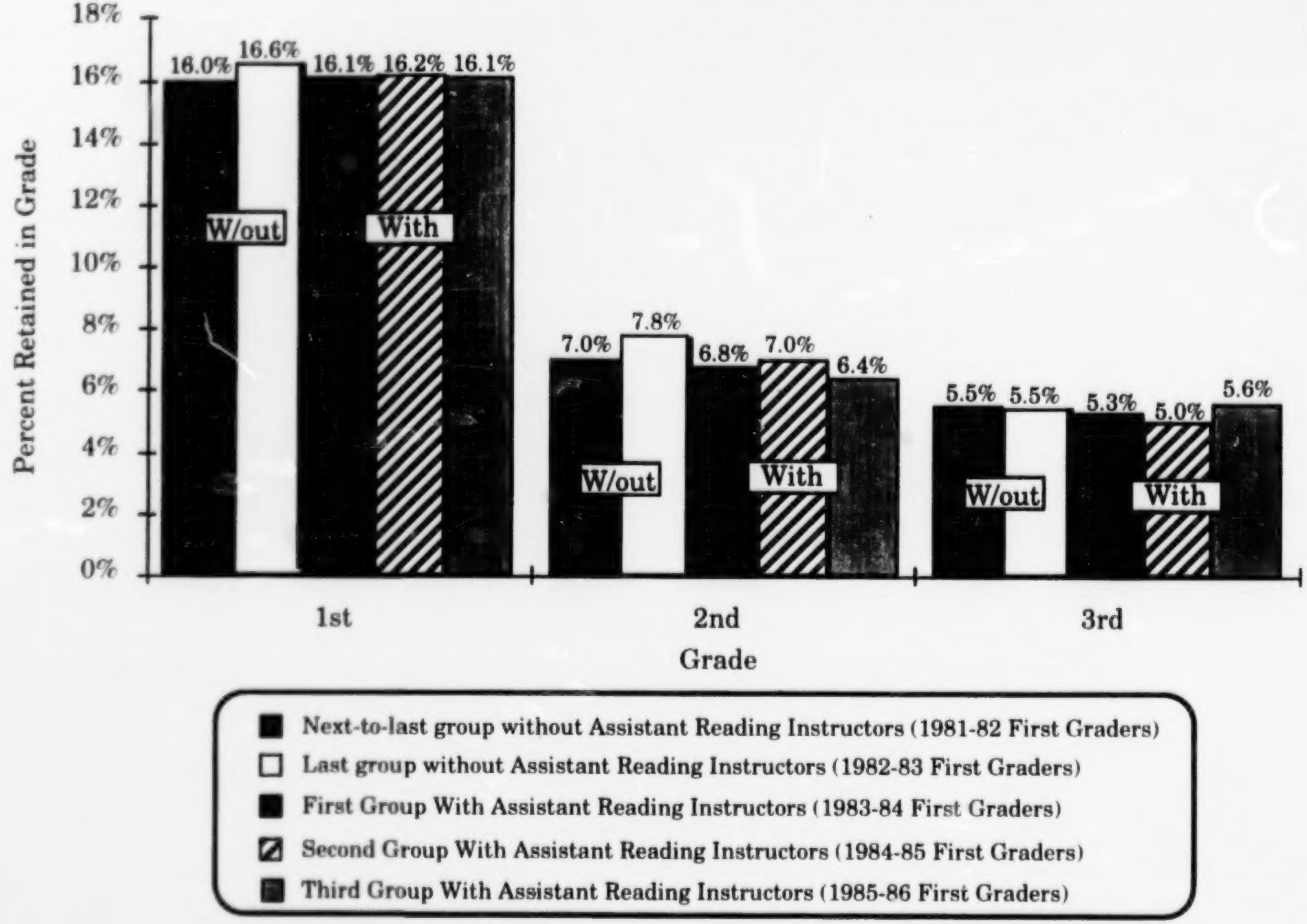
Program designers expected assistant reading instructors to help more students master the skills taught in the early grades, thus avoiding the need to retain students in first, second, and third grades. With this expectation in mind, the State Department of Education predicted that the rates at which students are retained (held back) in the primary grades would decline as a result of the assistant reading instructor program.

Exhibit 8, page 25, shows approximately equal retention rates for students with and without assistant reading instructors. Retention rates remained around 16%, 7%, and 5% for grades one, two, and three, respectively, for both groups. PEER found no evidence that the program has achieved the goal of reducing the rates at which students are retained in grade.

PEER restricted its review of primary grade retention data to the two groups entering first grade just prior to implementation of the assistant reading instructor program and the three groups entering first grade just after the program was implemented. As in the review of achievement, comparing these cohorts avoided mixing other factors, such as kindergarten implementation, into the analysis.

Exhibit 8

Percent of Students Retained in Each of the Primary Grades, by Group (Without or With Assistant Reading Instructors in the Primary Grades), 1981-82 through 1985-86



SOURCE: PEER analysis of Superintendent's Annual Reports, 1983 through 1987.

Dropout Rates

- *Secondary school dropout rates are higher for students who were served by assistant reading instructors.*

The State Department of Education expected the presence of assistant reading instructors in the primary grades to increase the rate of school completion. However, PEER's analysis of dropout data shows no evidence of a decline in dropout rates. (See Exhibit 9, page 27.) In fact, dropout rates in grades nine and ten increased from about 5% for students without assistant reading instructors in their primary years to about 7% for students taught by assistant reading instructors. As in the case of the comparisons described above, this data may be affected by other programs, by differences in students' backgrounds, or by societal factors that have affected each class differently. However, regardless of the causes of this increase in dropout rates, PEER found no evidence in the achievement or dropout data to support the theory that the assistant reading instructor program has increased students' success in school to such an extent that students are remaining in school at higher rates than they would have if the program had not been implemented.

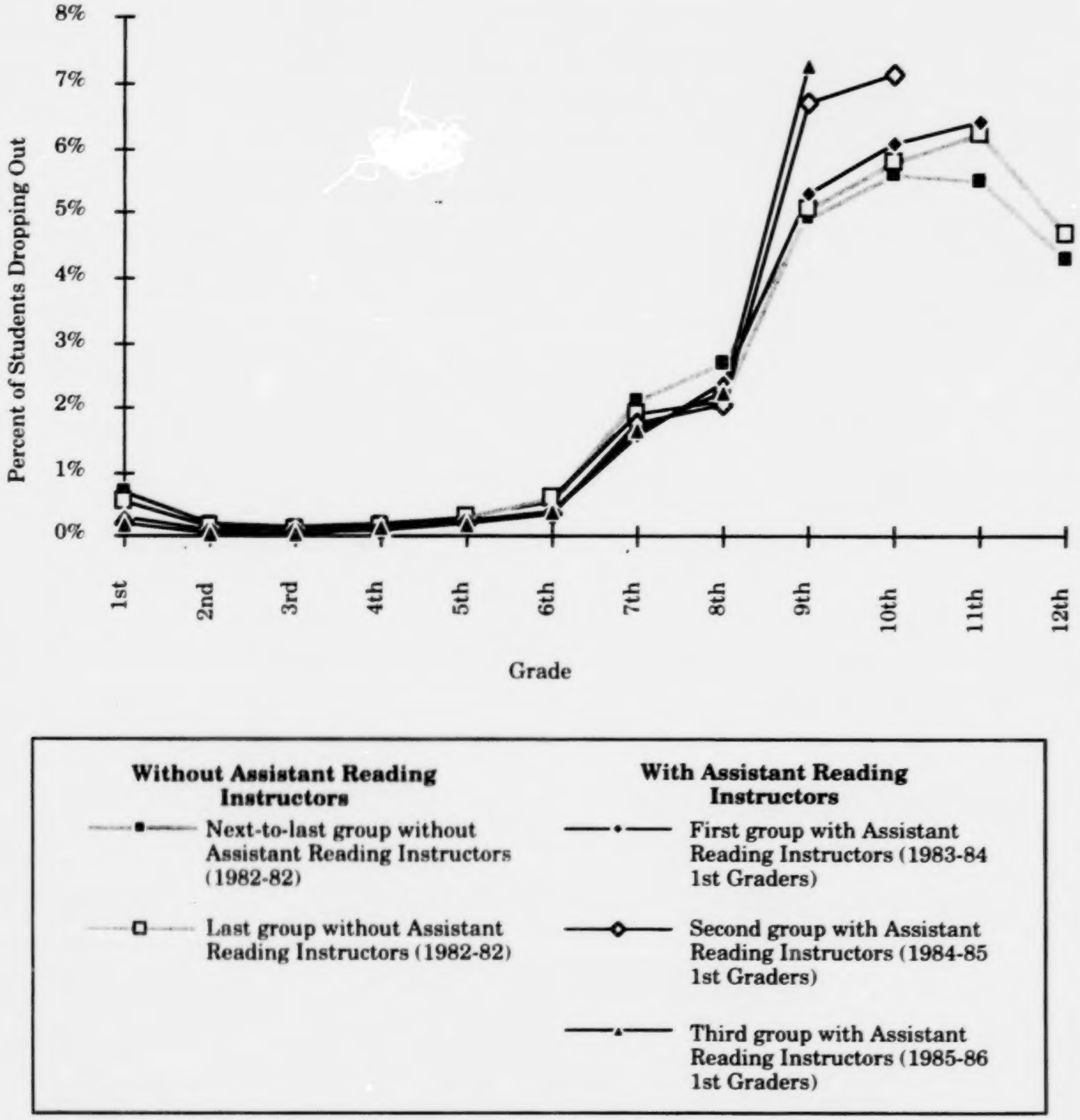
Externally Generated Studies

The conclusions reported above from PEER's analysis differ markedly from those of researchers who studied the program in its pilot years and during the earliest years of statewide implementation. Those researchers concluded that the program resulted in substantial, positive differences between students with and without assistant reading instructors. The only differences PEER found were small and these were detectable only in the achievement of students in extremely low-scoring districts.

PEER reviewed the evaluation reports prepared by those researchers in an effort to discern why a program that appeared to hold great promise now shows so little long-term impact. PEER also used these evaluation reports as a source of historic information on the characteristics of the pilot program and of the statewide program in its earliest years. PEER's summary and comments on two evaluations of the assistant reading instructor program are in Appendix C, page 59.

Exhibit 9

Percent Dropping Out: Groups Entering School Prior to and Following Implementation of the Assistant Reading Instructor Program



SOURCE: PEER analysis of data in Superintendent's Annual Reports, 1983-1994.

- *A summary of the 1983 evaluation of the Lee County reading aide program that was cited in a promotional pamphlet on the program's "proven effectiveness" implied that the school district's long-term gains in reading achievement were attributable to the reading aide program, even though the evaluation report itself arrived at no such conclusion.*

Two researchers employed by the Bureau of Educational Research and Evaluation at Mississippi State University evaluated the reading aide program initiated in the Lee County school district in 1977 (five years prior to passage of the 1982 Education Reform Act). They conducted this evaluation in 1982, just before the statewide program was approved and implemented, and published their report in March 1983.

The 1983 evaluation compared the gains of Lee County first- and second-grade students from the beginning of the 1981-82 school year through the end of that year with the score gains achieved by students in three school districts that did not have reading aides. In addition, the researchers compared the gains of Lee County third-graders with those of third-graders in one school district that did not have reading aides. The researchers found that Lee County first-graders gained an average of 109 score points, compared with comparison groups' gains of 98, 80, and 68 score points during first grade. They also found that Lee County second graders' reading comprehension score gains, which averaged 65 score points, exceeded the gains of students who did not have reading aides (average gains of 40, 36, and 28 score points). However, the researchers found that the gains of Lee County third graders, who had reading aides during their first two years of school but not in third grade, were lower (23 score points) than the gains of students in comparison third-grade classes (28 score points), who had not had reading aides at any time.

The score gains mentioned in the 1983 research report applied to changes in reading achievement from the beginning of the 1981-82 school year through the end of that school year. The researchers did not compute or discuss long-term score gains. Although they mentioned Lee County's low scores in 1976, they did not attribute gains since that time to the reading aide program.

Expectations for the statewide program rose when the State Department of Education included information drawn from an invalid report summary in a pamphlet on the assistant reading instructor program which stated that first-grade reading scores in Lee County had increased by 36 percentile points. Instead of describing the actual one-year gains mentioned above for first- and second-graders, the report summary states:

> In the first grades, where students had averaged at the twenty-third percentile nationally in reading before the program, students were now scoring above the national mean.

This statement, the summary's only mention of score differences with and without reading aides, implies that the data presented in the evaluation report supports a direct association between the reported score gains and this dramatic improvement, even though the report itself makes no such assertion. The research report contains no tables or comparisons showing Lee County's reading scores in 1976 or in any other pre-program year. In fact, the research itself was not designed to support a conclusion that the reading aide program was responsible for this leap in achievement over multiple years.

Nevertheless, the State Department of Education and others used this comparison of Lee County's first-grade reading scores in the mid-1970s with scores in the early 1980s to demonstrate the "proven effectiveness" of the Lee County program and the "unlimited potential" of the statewide program. In a more balanced view of Lee County's achievement gains, reviewers would have noted that average reading achievement in Mississippi was very low during the 1970s; that statewide achievement had improved by the early 1980s, prior to statewide implementation of the assistant reading instructor program; that Lee County's population was changing during the period when scores were increasing; and that, because of these conditions, some of the score gains noted for Lee County probably would have occurred even without the reading aide program. This invalid reference to achievement gains in the 1983 evaluation summary and in the State Department of Education's material may have played a part in the general tendency at the time to exaggerate the potential of the assistant reading instructor program for improving Mississippi students' reading achievement.

The 1983 Lee County evaluation also was not designed to provide information on the program's potential for improving mathematics and writing achievement, the other areas of basic skills achievement targeted by the assistant reading instructor program. The 1983 evaluation reviewed reading achievement gains only. The Reading Improvement Program's potential for increasing mathematics and writing or language scores remained untested.

- *Because of the State Department of Education's frequent changes in testing instruments, a 1986 evaluation of the assistant reading instructor program relied on comparisons among tests with different content.*

A researcher employed by the Bureau of Educational Research and Evaluation at Mississippi State University evaluated Mississippi's statewide assistant reading instructor program after it had been in effect for three years. This evaluator based his research on tests administered prior to and during the 1985-86 school year. This is the only State

Department of Education-sponsored evaluation of the assistant reading instructor program.

The 1986 evaluation compared the performance of two groups who had assistant reading instructors (1985-86 first- and second-graders) with two groups who also had assistant reading instructors (1984-85 first- and second-graders). In addition to these comparisons, which provided no information on differences in performance between students with and without assistant reading instructors, the evaluator compared the scores of third-graders who had assistant reading instructors (1985-86 third-graders) with the scores of third-graders who did not have assistant reading instructors (1984-85 third-graders).

Because the researcher did not have data from the same test series available at any of the relevant grade levels, he compared 1985-86 Stanford Achievement Test data with converted versions of whatever 1984-85 data was available for that grade level (California Test of Basal Skills for first and second grades and California Achievement Test data for third grade). Also, in a separate volume, the evaluator reported the results of a survey of teachers and assistant teachers. The purpose of this survey was to obtain descriptive information on program implementation and to determine respondents' opinions regarding various aspects of the program.

The researcher reported that first-graders' performance had dropped, but that second-graders continued to improve after having assistant reading instructors for several years. Results for third-graders were even more encouraging. After converting 1985-86 Stanford Achievement Test scores to their California Achievement Test equivalents, the researcher found that Mississippi third-graders who had been taught by assistant reading instructors (1985-86 third-graders) scored higher on all eight measures of achievement than had third-graders who had not been taught by assistant reading instructors (1984-85 third-graders). He also found that the average 1985-86 third-grader in his study met or exceeded the national average in all areas tested. In addition, more students scored in the upper quartile (the highest one-fourth nationally) in 1985-86 and fewer scored in the lower quartile (the lowest one-fourth nationally) than was the case for 1984-85 third-graders, who had not participated in the assistant reading instructor program.

As the researcher himself noted, however, his dependence on data from tests that may have covered different skills and knowledge may have invalidated the comparisons that led him to conclude that the assistant reading instructor program was successful. In retrospect, it is possible that early achievement gains noted in the 1986 study but undetectable in the same groups of students in later years are attributable to problems caused by inconsistency in the State Department of Education's use of testing instruments. (See Appendix N, page 102.) Alternatively, some portion of the reported gains may have been real in the early years, but these achievement gains may not have been strong enough to be detectable in the same students' achievement patterns three to five years later.

- *The early research on Mississippi's use of assistant reading instructors suggests the importance of training and program monitoring.*

Perhaps the greatest value of these early research reports to decision-makers in the 1990s is the information they provide on the assistant reading instructor program as it was implemented in Lee County on a pilot basis and in the state as a whole from 1983-84 through 1985-86. These evaluation reports suggest that the placement of well-trained assistant reading instructors in primary classrooms may be beneficial, but that personnel resources cannot be the only element in a successful reading improvement program. Both evaluation reports support a conclusion that improving the quality of the instructional program, including how students spend their classroom time, is essential to the success of such a program.

1983 Report: Improving how teachers and students use their time during the school day, instead of simply enlarging the size of the school staff, may be the key to improving student achievement. The Lee County evaluation provides a particularly detailed description of the program's emphasis on using "reading aides" (assistant reading instructors) as one component of a unified approach to instruction. That approach centered on ensuring that students were actively engaged in instructional tasks throughout a high proportion of the school day. To accomplish this, teachers and aides in Lee County spent a high percentage of their time working with individual students and with small groups. The evaluators said the effectiveness of this approach was consistent with research demonstrating that students who spend a high percentage of their time "on task" achieve significantly more academically than students in classrooms in which they are permitted to spend their time on largely non-academic activities (e.g., waiting in line, listening to announcements).

The evaluators' data showing greater gains in Lee County than in comparison districts may demonstrate that high levels of student time on instructional tasks, not necessarily the presence of aides, can improve students' reading skills. Lee County teachers may have kept their students' attention focused on instructional tasks with the assistance of aides, but this research did not demonstrate that the presence of aides alone, without a strong commitment to maintaining a high percentage of student time on instructional tasks, can result in score improvements. While aides may have helped these Lee County teachers and students use their classroom time well, the presence of aides may be neither a necessary nor a sufficient component of a program to improve teachers' and students' use of classroom time.

The results of this study demonstrate the importance of helping teachers spend more time on direct classroom instruction and on ensuring that students are actively engaged in well-designed instructional activities throughout the school day, regardless of the method used to achieve this use of classroom time.

1986 Study: Extensive training on effective instructional techniques and classroom management is an important component of a successful program. The 1986 report provides less information than the 1983 report on teachers', assistant teachers', and students' use of classroom time than does the 1983 study. However, the evaluator preparing the 1986 report mentioned concerns about the quality of the first-grade instructional program and a need for curriculum changes. The 1986 evaluator also documented an extensive training component that existed in the early years of program implementation. The availability of extensive training during the program's earliest years may account for some of the achievement gains reported in the 1986 evaluation.

Taken together, these external evaluation reports suggest that using an approach supported by research to improve the instructional program (such as training teachers and assistants in how to increase students' time-on-task) can enhance the effectiveness of the teachers and assistants who are part of that program.

Utilization of Assistant Reading Instructors

- **Do assistant reading instructors perform the activities in the classroom that they are supposed to perform?**
- **Do districts use assistant reading instructors as substitute teachers?**

Local districts use their assistant reading instructors in a variety of roles, including reinforcement of basic skills and performance of clerical duties. Most of the districts in PEER's district review used the assistants as substitute teachers on a routine basis.

Utilization of Assistant Reading Instructors in the Classroom

Laws And Regulations Governing the Role of the Assistant Reading Instructor

- *The laws and departmental regulations which govern the role of the assistant reading instructor in the classroom emphasize assisting pupils in basic skills instruction.*

The enabling legislation for the Reading Improvement Program (MISS. CODE ANN. Section 31-21-7 [2][a]) states that assistant reading instructors shall "assist pupils in actual instruction [of basic skills] under the strict supervision of a certified teacher." Both the pilot program and the early statewide program contemplated that assistant reading instructors would work in the classroom full time to reinforce and supplement basic skills instruction. The assumption was that having an assistant reading instructor in the classroom would improve standardized test scores by reducing the pupil/instructor ratio, increasing the students' time spent on learning tasks, and promoting individual and small group instruction.

In its 1983 program guidelines, the State Department of Education attempted to guide districts in clarifying the role of the assistant reading instructor. As shown in Appendix P on page 108, the department focused on illustrating specific types of instructional assistance activities (e.g., "listen to a student read orally") appropriate for an assistant to perform.

While current program regulations (refer to Section 6.0 of Appendix E on page 69) address the "Assistant Reading Instructor Role" in general terms rather than in terms of specific classroom activities, in response to concern that districts might be losing sight of the original program intent to use assistant reading instructors as instructional assistants versus teacher aides, the State Department of Education issued a July 22, 1994, memorandum to district superintendents (refer to Appendix Q on page 109) attempting to clarify the duties and responsibilities of assistant reading instructors. This memorandum stressed that the Legislature had placed assistant reading instructors in the classroom for "the sole purpose of providing additional instruction for students in the basic skills," and expressly prohibited the use of assistants as "aides, hall monitors, or substitute teachers."

- *Neither the local school districts nor the State Department of Education has conducted research to determine what assistant reading instructor activities are most effective in achieving program objectives.*

The problem with the department's recent attempt to clarify the role of the assistant reading instructor is that it is not grounded in program research documenting what activities are most effective for achieving program objectives. The result is a list of sanctioned and prohibited assistant reading instructor activities which may or may not have a positive impact on student performance and which, in some instances, are impractical (e.g., prohibiting assistants from supervising playgrounds or lunchrooms, even though assistants routinely accompany children in these activities) and in some instances are contradictory (e.g., prohibiting assistants from being used as substitute teachers except in extreme emergencies, even though program regulation 6.6 authorizes the use of assistant reading instructors as substitutes for periods not to exceed three consecutive days. Refer to more detailed discussion of this topic on page 38.)

Classroom Activities of Assistant Reading Instructors

Ideally, PEER would have unobtrusively observed assistant reading instructors performing their daily activities and documented the time that the assistants spent in each major category. However, PEER was unable to perform such unobtrusive observation at most of the local districts reviewed. Teachers and assistant reading instructors knew of PEER's interest in the Reading Improvement Program, a condition that made the collection of valid classroom observation data virtually impossible and forced PEER to rely, instead, on utilization data collected during its district review through interviews and announced classroom inspections.

- *In the classroom, assistant reading instructors reportedly provide some instructional assistance in addition to performing numerous clerical duties typical of traditional teacher aides.*

The objective of PEER's classroom utilization analysis was to describe what the assistant reading instructors do in the classroom and whether these activities conform to the intent of the law and to the roles and responsibilities outlined by the State Department of Education.

PEER's field interviews and observations showed that districts utilize assistant reading instructors in a multitude of capacities, including those both expressly encouraged and prohibited in the July 1994 State Department of Education memorandum. Exhibit 10 on page 36 lists some of the activities reported performed by assistant reading instructors in PEER's district review. Assistant reading instructors are helping with basic skills instruction as well as performing a significant number of traditional "aide" activities, such as making bulletin boards and grading papers.

In addition to the performance of basic skills reinforcement and routine clerical tasks, numerous respondents said that the assistant's role includes helping students socially and emotionally. Many said that a changing student population has forced assistant reading instructors to serve as surrogate parents, trying to meet the emotional needs of children from difficult home situations. Respondents in a variety of districts with diverse student populations perceived a disturbing increase in the number of children whose emotional/nurturing needs were not being met in the home. Several respondents reported a total lack of parental support, including failure to attend parent/teacher conferences, and failure to assist with simple homework assignments such as signing a card vouching that the child had read an assigned story. Some respondents described a home environment where the primary caretakers are illiterate.

Districts' Compliance with Departmental Regulations Related to Utilization of Assistant Reading Instructors

- *Of the eighteen files PEER reviewed, only seven (39%) contained documentation summarizing the assistant reading instructor's responsibilities.*

With respect to assistant reading instructors' knowledge of their roles and responsibilities, as part of its district review PEER tested for compliance with the State Department of Education's Reading Improvement Program regulation (5.14) requiring that each assistant reading instructor's personnel file contain a summary of the assistant reading instructor's responsibilities.

Of the eighteen Assistant Reading Instructor personnel files that PEER reviewed in the field, only seven (39%) contained such a document. Also, not all program coordinators had received a copy of the State Department of Education's July 1994 memorandum addressing the role of assistant reading instructors. This lack of file documentation, combined with significant training deficiencies (refer to discussion beginning on page 46), could result in assistant reading instructors and their supervising teachers failing to understand their respective roles clearly.

Exhibit 10

Types of Activities Performed by Assistant Reading Instructors

General Instructional

- assist students by interpreting directions
- assist students with drills or additional instruction
- review students in skills missed through absences
- monitor small group discussions and interactions
- operate audiovisual equipment

Reading

- tell or read stories to the children
- listen to children read
- listen to children's shared experiences and expression skills
- reinforce reading skills taught by the primary instructor
- assist students with reading problems
- assist in small group sessions with reading skills
- visit library with small groups of students to help them select reading materials

Writing

- model writing
- check student journals, including spelling checks
- assist students with manual writing skills
- write stories dictated by younger (e.g. kindergarten) children

Math

- work with children in centers using manipulatives
- assist children with math worksheets

Clerical/Other

- make bulletin boards
- grade papers
- sharpen pencils
- perform paperwork such as copying, stapling, handing out worksheets
- organize supplies
- assist with room arrangement and management
- assist with breakfast, lunch, breaks, bathroom and playground supervision
- perform bus duty

SOURCE: PEER's 1994 district review.

- *Assistant reading instructors and their supervising teachers report compliance with the departmental regulation requiring weekly instructional planning time.*

Another State Department of Education Reading Improvement Program Regulation (6.2) related to the utilization of assistant reading instructors requires the teacher and assistant reading instructor to have a minimum of thirty minutes per week together for instructional planning. While one assistant reading instructor included in PEER's district review reported spending no time in planning and another reported spending thirty to forty minutes per day, most of the assistant reading instructors interviewed said that they spend ten to fifteen minutes per day planning with their supervising teacher, usually during a natural break in the day such as nap time.

- *Kindergarten and first-grade assistant reading instructors report compliance with the program's regulation which requires them to remain with the same class all day.*

A final question in the area of utilization is whether district superintendents comply with the legislated mandate to "assign such assistant reading instructors to the kindergarten, first-, second-, and third-grade classes in the district in a manner that will promote the maximum efficiency in instruction, as determined by the superintendent." The State Department of Education's Reading Improvement Program regulations (6.9) address this provision of the law by requiring kindergarten and first-grade assistant reading instructors to remain with the same class all day.

The assistant reading instructors in kindergarten and first-grade classrooms in PEER's district review reported that they remain with their supervising teacher for the entire school day, unless summoned to fill in for another teacher or assistant reading instructor in an emergency.

- *Districts in PEER's district review did not comply with the State Department of Education's program regulations governing assistant reading instructors' performance appraisals.*

One of the most important mechanisms to ensure proper utilization of assistant reading instructors in the classroom is the individual's employee performance appraisal. The State Department of Education's Reading Improvement Program Regulations (8.1 and 8.2) require annual performance appraisals of assistant reading instructors. Further, Regulation 5.15 requires the local school districts to place copies of all such appraisals in the assistant reading instructors' personnel files.

The individual assistant reading instructor files reviewed by PEER contained evaluations (performance appraisals) less than one-third as often as required by departmental regulations. The eighteen assistant reading instructors PEER interviewed had been employed as assistants for a total of 113 years; therefore, their personnel files should collectively have contained documentation of 113 performance appraisals. However, the files continued documentation of only 34 performance appraisals, thirty percent of the number required by the state department's program regulations. Files of six of the eighteen assistant reading instructors contained no documentation of any performance appraisals. By not observing and providing feedback on the assistant reading instructors' classroom performance on an ongoing basis, district supervisory personnel deprive the program of a valuable tool for improvement.

In addition to the fact that districts do not conduct performance appraisals as frequently as required by program regulations, some of the appraisal forms are inadequate because of their lack of program specificity (e.g., focusing exclusively on generic work habits such as punctuality versus specific program activities such as assisting students with reading skill problems). Even the appraisals with program-specific rating factors are inadequate because of the lack of criteria for rating assistants on the various appraisal elements (e.g., criteria which define specific classroom behaviors which the rater can use to document the adequacy of the assistance provided by the assistant reading instructor). The lack of clear criteria limits the utility of the evaluation to the person being evaluated, because he or she does not know what specific work activities are required to achieve a high rating, and thus is hindered in improving performance in providing assistance with basic skills instruction.

Utilization of Assistant Reading Instructors as Substitute Teachers

The Reading Improvement Program's enabling legislation does not specifically address using assistant reading instructors as substitute teachers. However, the phrase in the law requiring the instructors to work "under the strict supervision of a certified teacher" implies that substitute work should be greatly limited, if allowed at all. Early program documents explicitly stated that the assistant teacher should not "substitute for teachers, clerks, or other people who may be absent or on other assignments."

Since inception of the program, the State Department of Education's position on using assistant reading instructors as substitute teachers has changed, with current program regulations permitting the assistant to serve as a substitute for the teacher to whom he or she is assigned for no more than three consecutive days. (See Appendix E, page 69, Regulation 6.6). The fact that the State Department of Education's July 1994 memorandum specified that assistant reading instructors should not "be used as substitute teachers except in extreme emergencies," and then referred to the current regulations, could be viewed as a policy contradiction, since current regulations clearly permit the use of assistant reading instructors as substitutes in non-emergency situations.

- *Districts in PEER's district review report widespread use of assistant reading instructors as substitute teachers.*

To gain an understanding of the extent to which districts use assistant reading instructors as substitute teachers, PEER examined substitute records for the 1993-94 school year for the eighteen supervising teachers included in PEER's district review. The data supplied by the districts showed that of 143 days that the supervising teachers were absent, assistant reading instructors served as substitute teachers 74% of the time.

Most districts in PEER's sample only require substitute teachers to have a high school diploma, which is the same minimum education requirement for assistant reading instructors. Further, many districts argue that the assistant reading instructor is in a better position than a substitute to fill in for the teacher, since the assistant knows the children as well as the curriculum. Nevertheless, the utilization of assistants as substitutes, while convenient, violates the intent of the program, which is to provide increased staffing for basic skills instruction.

Local school districts have a financial incentive to utilize assistants as substitute teachers, since they can save the money that they would have had to pay a substitute teacher. PEER estimates that the schools reviewed saved $3,798 during fiscal year 1993-94 for the sample absences alone (based on absentee data for the supervising teachers of eighteen out of 4,774 assistant reading instructors), but these savings came at the expense of maintaining the higher staffing levels for which assistant reading instructor funds were intended.

Legal Compliance

- **Are relevant parties complying with program statutes?**

The State Department of Education and the local districts have failed to comply with provisions of the Reading Improvement Program law.

Program Accountability

The Reading Improvement Program law contains model accountability provisions. By requiring the districts to develop implementation and performance accountability plans and by requiring both the local school districts and the State Department of Education to evaluate the program's effectiveness on an ongoing basis, the Legislature, in effect, mandated establishment of an internal evaluation system. Such a system is critical to any program's success in that it:

- establishes, in operational terms, what a program is supposed to accomplish;
- forces the entity to monitor progress made towards accomplishment of its objectives; and, by so doing,
- continuously focuses the program staff's attention on improving progress towards the program's objectives.

By ignoring statutory requirements for program accountability, the State Department of Education and local school districts are not optimizing utilization of program resources.

Legal Requirements Regarding Program Accountability

The Reading Improvement Program law contains several provisions related to accountability, specifically requirements for each district to:

- submit a plan on the implementation of a reading improvement program to the State Department of Education;
- develop a plan of educational accountability and assessment of performance for reading in Grades One through Six;

- evaluate their program annually in accordance with their educational accountability and assessment of performance plan;

and for the State Department of Education to evaluate the program annually through the use of an acceptable standardized testing system.

Compliance with Legal Requirements Regarding Program Accountability

- *Local districts have not submitted Reading Improvement Program implementation plans.*

The State Department of Education's original *Guidelines for the Mississippi Reading Improvement Program* (April 1983) outlined a two-phased approach to addressing the law's requirement for implementation plans. In the first phase, applicable to the 1983-84 school year only, the department required each school district to complete a program application form projecting the number of assistant reading instructors to be hired and describing the tests that it planned to administer to students in grades 1 through 3.

Phase 2 required each district to submit a final plan for implementation of the program by May 1, 1984. In its program guidelines the department noted that it would disseminate guidelines for writing the plans to each local school district in the fall of 1983 and that after reviewing each district's plan, it would either approve the plan for funding or negotiate with the district for appropriate revisions to the plan and then fund it.

Because no complete set of Reading Improvement Program historical documents is available (refer to discussion on page 2), it is not clear whether the State Department of Education ever distributed the implementation plan development guidelines or whether any districts ever submitted plans for program implementation. Since no one at the State Department of Education or in the districts included in PEER's district review was able to provide copies of such a plan, it seems unlikely that such plans were ever developed.

The State Department of Education's Reading Improvement Program Coordinator said that the only Reading Improvement Program plans that she was aware of were the staff development plans which each district submits annually for all district employees, including assistant reading instructors. MISS. CODE ANN. Section 37-17-8 requires each district to develop and submit annually to the State Department of Education for approval an in-service staff development plan according to State Department of Education guidelines. Staff development plans, which describe plans for training teachers and other staff in grades K through 12, are clearly not Reading Improvement Program implementation plans.

District Reading Improvement Program supervisors were also unable to provide copies of program implementation plans. Some districts said that they could have had such a plan at the beginning of the program, but would have thrown it away if it was more than five years old. Several of the district employees who had been employed since the program was implemented had no recollection of such a plan. Further, the districts' arguments that they may have at one time had an implementation plan are irrelevant, because an implementation plan should be an active, evolving guide for directing activities and resources towards clear objectives, not a historical artifact.

The consequence of never having formulated program implementation plans is that the State Department of Education and the districts have not clearly articulated what they hope to accomplish in their reading improvement program or how they plan to accomplish it, and therefore have no basis for developing meaningful feedback as to how to improve the performance of assistant reading instructors and their supervising teachers.

- *Local school districts have not submitted plans of educational accountability and assessment of performance for reading in Grades 1 through 6.*

Neither the State Department of Education nor any of the districts included in PEER's sample could provide copies of a "plan of educational accountability and assessment of performance for reading in Grades One through Six" which served as part of their implementation of the Reading Improvement Program.

In its 1983 Reading Improvement Program Guidelines, the State Department of Education stated that it planned to provide each elementary school with publications addressing topics including:

- a structured evaluation program to measure program effectiveness. . .and,
- implementation and use of a standardized testing program.

Several district supervisors interviewed by PEER deferred to the department on evaluation matters, saying that it was up to departmental personnel to establish evaluation requirements for the Reading Improvement Program. One district program supervisor who was involved with the program from its inception said that the department was on the verge of disseminating program evaluation guidelines to the districts, but never carried through, possibly due to changes in the State Department of Education's administration.

The absence of a consistent, uniform testing program forces external evaluators such as PEER into the difficult position of having to piece together program effectiveness data (see discussion on page 29 of problems associated with frequent changes in testing instruments). Consistent, uniform data is crucial to any assessment of progress districts make in teaching students to read, write, and compute.

- *The State Department of Education and local districts have not evaluated the Reading Improvement Program on an annual basis.*

The law is explicit in its requirement for ongoing evaluation of the Reading Improvement Program by both the State Department of Education and the districts. Specifically, the law states that districts shall "annually evaluate their program in accordance with their educational accountability and assessment of performance plan," and that the State Department of Education shall "annually evaluate the program through the use of an acceptable standardized testing system." The department even adopted the exact language requiring districts to evaluate the program annually in its current (1993) Reading Improvement Regulations (2.1 and 2.2).

None of the districts included in PEER's district review could provide PEER with copies of annual evaluations of the Reading Improvement Program, and the State Department of Education only commissioned one such statewide review (refer to discussion of 1986 evaluation on page 29). Further, the State Department of Education has never evaluated the effectiveness of using assistant reading instructors in kindergarten, as the students included in the 1986 evaluation began school prior to implementation of the kindergarten program.

In response to PEER's request for annual evaluations of the Reading Improvement Program, the State Department of Education said that the Mississippi Statewide Testing Program serves as Mississippi's education assessment. All districts administer standardized tests at various grade levels (currently grades four through eight) as mandated by the State Department of Education pursuant to subsection (b) of MISS. CODE ANN. Section 37-16-3 (which requires a uniform statewide testing system), and many districts administer "off-grade" standardized tests at various grade levels at their own cost and discretion.

The Reading Improvement Program's statute (MISS. CODE ANN. Section 37-21-7 (2)(c)(iv)) requires that the State Department of Education conduct an annual evaluation based on an "acceptable statewide testing system." The inclusion of language on student testing in this evaluation mandate demonstrates lawmakers' intent that student achievement be at least one of the variables covered by the required program evaluation.

However, this call for a testing system does not imply that the State Department of Education's evaluation responsibilities begin and end with administration of a standardized test.

Designed to comply with a statutory mandate that student achievement in general be tested annually and that scores be reported, the State Department of Education's report on the statewide testing program describes trends in scores for all grades and subject areas tested. It does not consider process or outcome questions related to specific programs, such as the Reading Improvement Program. As a result, the summary report on test scores is too general to meet the department's specific statutory responsibility for evaluating the assistant reading instructor program.

In addition to claiming that the statewide testing program fulfilled the statutory requirement for annual program evaluations, the State Department of Education's Reading Improvement Program coordinator and district program supervisors stated that they comply with the requirement by conducting annual performance appraisals of the assistant reading instructors. A performance appraisal of assistants as well as of other program personnel (teachers, principals and other support personnel also play important roles in implementing an effective Reading Improvement Program) is only one potential element of a Reading Improvement Program evaluation, and is not in and of itself sufficient.

In *Educational Evaluation* (New York: Longman, 1987), noted evaluators Blaine R. Worthen and James R. Sanders stated that program evaluators should base their research on specific program-related questions and should consider the criteria that will be used to determine the answers to those questions. For example, the Department of Education might have asked:

- whether the department and local school districts were implementing the program in compliance with relevant statutes and regulations;
- whether training was adequate;
- how assistant reading instructors actually were being utilized;
- whether assistant reading instructors were improving the quality of basic skills instruction in the primary grades;
- whether achievement gains and the accomplishment of other program objectives could be detected; and,
- whether instructional methods, classroom procedures, and program materials contribute to program effectiveness, and, if

so, whether these gains could validly be attributed to the Reading Improvement Program.

According to Worthen and Sanders, a program evaluation also should culminate in the release of an evaluation report that contains judgments about the program that was evaluated. For example, annual reports on the Reading Improvement Program would have commented on the program's strengths and weaknesses, and would have recommended action to improve the program.

Program Funding

Legislators who wrote the Reading Improvement Program law apparently considered plans for program implementation, accountability, and assessment so critical to program success that they made assistant reading instructor funding contingent on their development by each school district. Even though the school districts never developed such plans, the State Department of Education funded them anyway, thereby removing a powerful incentive for districts to comply with the law.

Legal Requirements Regarding Program Funding

MISS. CODE ANN. Section 37-21-7 (2)(c)(ii) (1972) states:

> In order to receive funding, each school district shall:
>
> 1. Submit a plan on the implementation of a reading improvement program to the State Department of Education; and
>
> 2. Develop a plan of educational accountability and assessment of performance for reading in Grades One through Six.

Compliance with Legal Requirements Regarding Program Funding

- *The State Department of Education has not adhered to legal prerequisites for distribution of reading improvement program funds to local school districts.*

The State Department of Education's 1983 Reading Improvement Program Guidelines stated that initial program funding would be contingent upon the department's approval of the district's plans and that funding in subsequent years would be based upon monitoring and program auditing. Despite the failure of the districts to develop such plans, the State Department of Education funded assistant reading instructors in all districts. The department did not review districts' compliance with legal prerequisites before distributing reading improvement funds.

Training

Even though the law is explicit in its requirement that the State Department of Education take a leadership role with respect to the training of assistant reading instructors, the department is taking a reactive role--instead, waiting for districts to request training assistance. As a result, a statewide uniform training program does not exist for assistant reading instructors and the districts in PEER's district review do not provide the program-specific training necessary for an effective Reading Improvement Program.

Legal Requirements Regarding Training

MISS. CODE ANN. Section 37-21-7 (iv)(1) directs the State Department of Education to:

> Develop and assist in the implementation of a statewide uniform training program for teachers and assistant reading instructors.

Further, MISS. CODE ANN. Section 37-21-7 (2)(c)(iii) directs each district to:

> 1. Implement an annual orientation session emphasizing program goals;
> 2. Hold periodic workshops for teachers on the effective use of assistant reading instructors;
> 3. Provide training annually on specific instructional skills for assistant reading instructors. . . .

If the training program for the Reading Improvement Program is to be statewide and uniform, the State Department of Education should have content input into the three training mandates which the law directs the districts to execute.

Compliance with Legal Requirements Regarding Training

- *The State Department of Education and the local districts have not complied with training requirements of the Reading Improvement Program law.*

The State Department of Education has failed to develop and implement a statewide uniform training program for teachers and assistant reading instructors. While the 1983 Reading Improvement Program Guidelines show that the State Department of Education began development of a statewide uniform training program for teachers and assistant reading instructors and even held regional workshops and distributed training packets to the districts, the department abandoned such efforts in the mid to late 1980s.

The State Department of Education's Reading Improvement Program Coordinator does not mandate or monitor the type of training which the districts provide to their assistant reading instructors and supervising teachers. She takes the position that it is the responsibility of the districts to ensure that assistant reading instructors and their supervising teachers receive the appropriate training. She said that every district has unique needs and she only assists in addressing those needs by scheduling tailor-made training at the specific request of a school or district. The coordinator's records show that during the 1993 calendar year, only three of the workshops which she held, with a combined total of 375 participants, included assistant reading instructors. Of the forty workshops which she conducted from January 1994 through August 1994, her records do not show that any assistant reading instructors were present.

The only training requirement which the State Department of Education uniformly imposes on the state's assistant reading instructors is a minimum credit requirement established by the department's Office of Staff Development requiring assistant teachers to earn a minimum of twenty staff development credits in the first year of employment and ten credits annually thereafter.

The problem with the State Department of Education's current policy of leaving up to the districts the content of training courses offered to assistant reading instructors and their supervising teachers is that it is totally inadequate to ensure that the statutory training requirements of the Reading Improvement Program are being met. No uniformity exists in the staff development courses taken by assistant reading instructors or their supervising teachers from district to district. A statewide uniform training program does not exist.

All local districts have not complied with the requirement for annual orientation sessions emphasizing program goals. Regarding the legal requirement for each school district to implement an annual orientation session emphasizing Reading Improvement Program goals, not only has the department failed to provide a leadership role in the establishment of such an orientation session, but as discussed on page 42, the department has failed to articulate clearly to the districts the Reading Improvement Program goals and objectives. Of the eight districts included in PEER's sample, only one had a formal program-specific orientation. Most of the districts simply included the assistant reading instructors in their general orientation program or conducted informal conferences between instructors, assistant reading instructors, and/or principals during which the duties and responsibilities of the assistant reading instructors were discussed.

All local districts have not complied with the requirement for conducting training for instructors on the effective use of assistant reading instructors. Regarding the statutory requirement that each school district hold periodic workshops for teachers on the effective use of assistant reading instructors, only one of the eight school districts included in PEER's sample offered such a course during the 1993-94 school year.

The failure to emphasize training may have contributed to the program's minimal effectiveness. A State Department of Education brochure issued in the early 1980s promoting the Reading Improvement Program noted that "local school leadership, capable assistants, and **proper training** [emphasis added] are prerequisites for the successful implementation of Mississippi's Reading Instructor Program." The brochure further noted that "training for teachers and assistant teachers helps ensure proper classroom management and a good working relationship in the teacher/assistant combination." Aside from the fact that the State Department of Education violates state law by not ensuring that a statewide uniform training program exists, the current failure of the State Department of Education to emphasize training may be a primary reason that the Reading Improvement Program is not demonstrating more dramatic results, for example, in terms of test score gains. Upon entering employment in the school system, most assistants are not trained educators, and most educators are not trained in the proper use of assistant reading instructors. On-the-job training is critical to ensure that the assistants have the ability to perform their primary task of providing direct basic skills instruction to students and that the teachers, principals, and other district employees engaged in supervisory roles have the program training to understand and support the role of the assistants.

Minimum Qualifications for Assistant Reading Instructors

While the law establishes minimum qualifications for assistant reading instructors and the State Department of Education has operationalized these legal requirements in its program regulations, districts are failing to document compliance by including departmentally required evidence in the personnel files of all assistant reading instructors.

Legal Requirements for Assistant Reading Instructors

MISS. CODE ANN. Section 37-21-7 (1972), Subsection (2)(c)(i) states:

> Assistant reading instructors shall have, at the minimum, a high school diploma and shall show demonstratable proficiency in reading and writing skills.

The State Department of Education Division of Instruction's original program guidelines (April 1983) state:

> One of the most important tasks performed by school administrators related to the success of the Reading Improvement Program in their schools is the selection (employing) of the assistant teachers. If inappropriate people are employed as assistant teachers, all of the program planning, training activities, and program implementation strategies will be of little practical value.

The department operationalized the law in its Reading Improvement Program Regulations (refer to Sections 3.0, 4.0, and 5.0 of Appendix E on page 69.)

Districts' Compliance Regarding Minimum Qualifications

- *Local districts' personnel files do not always contain documentation of compliance with minimum qualifications for assistant reading instructors.*

While all school districts included in PEER's district review claimed to administer pre-employment tests and evaluations in accordance with departmental policy, assistant reading instructor personnel files did not always contain required documentation of compliance with minimum qualifications.

Of the eighteen assistant reading instructor personnel files that PEER examined:

- six contained no documentation regarding education (although all of the assistant reading instructors interviewed stated that they possessed at least a high school education);
- eleven contained no standardized written test results; and,
- eight contained no documentation of completion of the required oral reading test.

Accreditation

The fact that school districts and the State Department of Education do not comply with most of the legal requirements of the Reading Improvement Program law violates the department's own accreditation standards and thus the law requiring the state board of education to ensure compliance with the accreditation standards.

Compliance with Accreditation Standards

- *The State Board of Education has not insured compliance with accreditation standards as required by MISS. CODE. ANN. Section 37-17-1 et seq.*

Process standard 3-1 of the *Accreditation Requirements of the State Board of Education* (Bulletin 171, Eleventh Edition, 1992) requires that:

> The school district complies with federal and state laws, rules, and regulations and policies of the State Board of Education listed in Appendix A.

Appendix A (Standard 3-1 Requirements) requires that:

> . . .The school district is in compliance with state and or federal requirements for the following programs:
>
> 33.1 Early Childhood Programs (pre-K, kindergarten, **and teacher assistant** [emphasis added]). . . .

The Office of Accreditation's checksheet for the Reading Improvement Program bases determination of legal compliance on teacher/assistant teacher questionnaires. These questionnaires are inadequate for determining the program's compliance with state laws for the following reasons. First, the questions do not even address many of the most important provisions of the law, such as the requirements for implementation and accountability plans as preconditions to funding and ongoing program effectiveness evaluations.

The State Department of Education's Accreditation teams do not verify the existence and utilization of legally required plans when conducting their site visits. When asked how the Office of Accreditation determines what it will check for compliance, the Office Director stated that each program director is responsible for outlining the laws, rules and regulations that the Office of Accreditation is to check for compliance.

Secondly, the Office of Accreditation's questionnaires are inadequate to establish compliance with any of the provisions of the Reading Improvement Program law because:

- The State Department of Education has failed to establish performance standards regarding what constitutes compliance. For example, the law says that assistant reading instructors are to "assist pupils in actual instruction under the strict supervision of a certified teacher," yet no one has established what constitutes compliance--i.e., what is strict supervision? how much time in this activity is acceptable versus not acceptable?

- The State Department of Education has failed to establish proper compliance verification procedures. Asking people whether they are complying with the law is an insufficient measure of legal compliance. Whenever possible, the department should examine independent records in documenting compliance with program laws.

- The questions are leading, which makes the response information collected suspect.

Potential Effectiveness

- **What is the potential effectiveness of the Reading Improvement Program?**

The potential effectiveness of the Reading Improvement Program as implemented is minimal. The concept itself may have potential for improving student achievement, but moving from a promising concept to a program that substantially improves student achievement would require extensive planning, intensive staff training, and continuous monitoring and adjusting at the state and local levels.

The Reading Improvement Program lacks performance standards defining effectiveness, a system for monitoring the program, and an adequate training component. If the State Department of Education does not provide research-based information to school districts on how to change their programs to ensure that they will improve student achievement; if the districts do not carefully plan and monitor their programs; if no one provides adequate training to program service providers; and if no state authority consistently checks on whether students' reading skills are improving, the program will continue to produce disappointing results.

Although the Reading Improvement Program has not been effective as implemented, a program that provides assistant reading instructors in primary classrooms may have potential for improving student achievement because assistant reading instructors can help teachers establish a classroom environment that promotes learning. Recent research in the field of education suggests that "classroom management," comprised of variables such as the prompt and efficient handling of routine tasks, the minimization of distractions and interruptions, learner accountability, having materials ready for use, and handling behavior problems in a manner that is minimally disruptive to the classroom, ranked number one in terms of its impact on learning. According to a comprehensive evaluation of educational research entitled *Toward a Knowledge Base for School Learning* (M. C. Wang, G. D. Haertel, and H. J. Walberg, The National Center on Education in the Inner Cities, Temple University Center for Research in Human Development and Education):

> . . . empirical findings abundantly demonstrate the effectiveness of particular classroom management techniques (Doyle, 1986). Effective classroom management has been shown to increase student engagement, decrease disruptive behaviors, and enhance the use of instructional time, all of which results in improved student achievement.

Also:

> Efficient classroom management enables teachers to spend more time on instruction than addressing discipline problems and bureaucratic tasks. The increased quantity of time for instruction is positively related to

> enhanced student achievement. Teacher and student academic interactions promote learning by allowing teachers to receive more regular feedback about the effectiveness of their instruction and to tailor that instruction to meet the specific needs of their students.

Assistant reading instructors are in a position to help teachers to address classroom management variables. This research may suggest that a well-trained instructional assistant who works with the teacher to ensure that a high proportion of classroom time is spent on instruction could promote academic achievement. (See discussion on researchers' analyses, page 31.)

In addition to the above research, Mississippi's experience suggests that assistant reading instructors may be effective in promoting achievement in low-scoring districts. (See discussion of program effectiveness, page 18, and comments on ways in which assistant reading instructors contribute to school improvement, according to individuals interviewed by PEER [Exhibit 11, page 54].) Additional research on the conditions under which assistant reading instructors could be most effective could serve as a basis for targeting the program's use of resources.

While research offers some hope that assistant reading instructors can be effective in promoting achievement, many questions persist concerning how to move from a promising concept to an effective program. The assistant reading instructor alone cannot produce results in the absence of an effective teacher, a strong curriculum, and a supportive school environment. Only through well-researched, broad-scope program design, accompanied by continuous monitoring and adjustment and by proper training of program service providers, can the state hope to establish a truly effective reading improvement program.

Policy Options

While program improvement is one response to the problems described in this report, other options are available to the Legislature. PEER offers the following four policy options:

- Make the Reading Improvement Program work as originally intended by requiring the responsible parties to comply with all provisions of the Reading Improvement Program law;
- Convert the Reading Improvement Program into a Teacher's Aide program;
- Divert the money used for the Reading Improvement Program to other educational programs; or,

Exhibit 11

Ways in Which Assistant Reading Instructors Contribute to School Improvement, According to Individuals Interviewed by PEER

Following are some of the ways in which individuals interviewed by PEER said assistant reading instructors improve the quality of students' school experience. *PEER has not verified the accuracy of these observations.* None of the respondents produced data to substantiate their claims.

Instructional Support

- Focus attention on the needs of the individual child by doubling the opportunity for one-on-one interaction; allowing more time for the teacher to assess students and to focus on their strengths and weaknesses; providing more opportunities to read to an instructor, which improves reading skills; providing the teacher more time to prepare specialized materials; allowing grouping according to abilities.
- Allow the teacher to use innovative instructional approaches, such as accommodating diverse student learning styles; hands-on learning; learning centers; Writing to Read; whole language; portfolio assessment; Onward to Excellence; multi-age instruction; developmentally appropriate practices; small group discussions.
- Allow teachers to use the school day more efficiently by allowing coverage of more materials, as two instructors take less time to make the rounds of all children; increasing "time-on-task" by prompting children to focus when their attention is being diverted.
- Improve the quality and continuity of instruction by providing the teacher more planning/preparation time; minimizing disruption of the lesson when the teacher must be out of the classroom for short periods of time.
- Improve student assessment, including performance-based testing (portfolios) and frequent mastery assessments (e.g., every six weeks), which facilitates reteaching in areas of deficiencies.

Emotional Support

- Boost children's self-esteem by preventing them from falling too far behind the rest of the class and thereby becoming discouraged.
- Provide a "human touch."
- Keep the classroom atmosphere calmer and therefore more productive.
- Heighten the enthusiasm level of the class.

School Support

- Increase the supply of teachers with classroom experience, as some assistants return to school for teaching certificates.
- Increase parental involvement by contacting parents.

SOURCE: PEER analysis of interviews with assistant reading instructors, teachers, program supervisors, and other educational personnel.

- Abolish the Reading Improvement Program and redirect the funds to the state General Fund or reduce taxes accordingly.

Appendix A

Description of PEER's District Review

In order to understand and describe how districts have implemented the reading improvement program and to test for compliance with state law and program regulations, PEER conducted a purposive sample of eight school districts. PEER based its selection on an analysis of each district's performance on standardized achievement tests administered at the eighth-grade level for school years 1989-90 through 1993-94.

PEER divided the districts into four categories, based on their eighth-grade standardized test performance prior to the use of assistant reading instructors: low, medium low, medium high, and high. From each of these categories, PEER selected from those districts realizing the greatest average gain in standardized test scores for the four groups of eighth-graders who had assistant reading instructors in their primary years immediately following program implementation. This selection method yielded the following five districts:

- Petal School District;
- Humphreys County School District;
- Franklin County School District;
- Simpson County School District; and,
- North Panola Consolidated School District.

PEER also included Tupelo Public School District and Lee County School District in the sample because these were the pilot districts and PEER believed that there was a high probability that these districts would have been exposed to the most careful implementation of the program as any districts. PEER selected Pearl Public School District to serve as its site for testing its review procedure.

At each site, PEER staff interviewed the reading improvement program coordinator and a random sample of at least two assistant reading instructors and their supervising teachers. PEER staff interviewed a total of eighteen teacher/assistant teacher pairs in the following grades:

Grade	# of Pairs Interviewed
K	8
1st	4
2nd	4
3rd	2
Total	18

PEER also reviewed the personnel files of the assistant reading instructors interviewed, as well as all available program documents.

SOURCE: PEER staff.

Appendix B

Description of Chapter 1 Program

Chapter 1 is a federally funded compensatory education program. It provides funds for school districts to spend on supplementary services for "educationally disadvantaged" children. Districts may not use Chapter 1 funds to supplant those funds that a district must spend on basic education. The program defines "educationally disadvantaged" as those children who are achieving below average as compared to their peers. This measure of achievement is most often determined by use of a norm-referenced achievement test.

Once a district identifies eligible children by using test scores, it may decide the best way to deliver supplementary services to them. This may include hiring additional teachers or teacher aides. These aides can only serve Chapter 1 students.

SOURCE: State Chapter 1 program coordinator.

Appendix C

Summary and Analysis of Research on Effectiveness of Assistant Reading Instructors

This appendix summarizes PEER's review of two early research reports which studied the Reading Improvement Program in its pilot years and during the earliest years of statewide implementation:

- *An Evaluation of Placing Teacher Aides in Elementary Reading Classrooms of Lee County, Mississippi,* by Dr. Thomas H. Saterfiel and Dr. Herbert M. Handley, published in March 1983; and,
- *Third Phase: Achievement Gains Associated with Implementation of the Assistant Teacher Program in the First Three Grades,* by Dr. Herbert M. Handley, July 1986

Saterfiel and Handley's Evaluation of Pilot Program (1983)

Drs. Saterfiel and Handley evaluated a reading aide program initiated in the Lee County school district in 1977 (five years prior to passage of the 1982 Education Reform Act). They conducted this evaluation in 1982.

Design of the study: Saterfiel and Handley compared the standardized test performance of first-, second-, and third-graders in Lee County, where first- and second-graders had reading aides, with the performance of classes at the same grade levels in three comparison districts. One comparison district had a kindergarten program but no reading aides; another comparison district, located in an urban setting, had no kindergarten or reading aide program; the third district, located in a rural environment, also had no kindergartens or reading aides.

To compare the performance of Lee County students with the performance of comparison groups, Saterfiel and Handley subtracted each group's average reading performance at the beginning of the school year from the scores they achieved at the end of the year. They considered wide differences between scores attained at the beginning and end of first grade to be superior to small differences between beginning and ending scores. In addition to these standardized reading test score comparisons, Saterfiel and Handley compared the percent of time first-graders spent on academic tasks in Lee County (with reading aides) with the percent of time first-graders typically spent on academic tasks, as reported in the national literature. They also studied teacher and aide activities to determine how they spent their time in the classroom.

Results of the study: The researchers found that Lee County first-graders, the students with reading aides, achieved higher gains during first grade than did students in comparison school districts who did not have reading aides. The researchers found that Lee County first-graders gained an average of 109 score points, compared with comparison groups' gains of 98, 80, and 68 score points during first grade. They found that Lee County second-graders' reading comprehension score gains, which averaged 65 score points, exceeded the gains of students who did not have reading aides (average gains of 40, 36, and 28 score points). They reported that gains among the lowest-ability students (those who scored very low on the pre-test) were particularly dramatic, but they *did not provide quantitative data to support this conclusion*. The researchers also reported that Lee County first- and second-grade students scoring high on the pre-test gained less than comparable students in districts without reading aides, but *provided no data on these comparisons*.

Saterfiel and Handley found that the gains of Lee County third-graders, who had had reading aides during their first two years of school but not in third grade, were lower (23 score points) than the gains of students in comparison third-grade classes (28 score points), who had not had reading aides at any time. The third-grade comparison involved only Lee County and the district with kindergartens but no reading aides.

Saterfiel and Handley also found that Lee County first- and second-graders spent a higher proportion of their time (an average of 84%) on academic tasks, compared to students in high-quality reading programs described in the national literature. Students in these comparison studies spent approximately 70% of their time on academic tasks. In addition, they found that 85% of teacher/reading aide time was devoted to small group or individualized instruction. They concluded that the instructional commitment exhibited by teachers, aides, and students in the reading aide program was commendable.

Conclusions and recommendations of the researchers: The researchers concluded that Lee County's reading aide program "has led to outstanding gains for the lowest ability students." They also concluded, however, that the improvement in first- and second-graders' achievement "appears to have been canceled out by the time children finish third grade."

Saterfiel and Handley concluded that the Lee County reading aide program was promoting small group and individualized instruction, and that students in schools with reading aides spent extremely high proportions of their time on instructional activities.

The researchers recommended continuation of the Lee County program and extension of the program into the third grade to sustain initial gains. Within a recommendation on refining the program to respond to the needs of high-ability students, they said the Lee County program "has had near phenomenal success with average and below-average achievers" in the first and second grades. They also recommended careful study of patterns of instruction in individual classrooms to ensure consistency in evaluating the process and product of the reading aide program.

PEER Comments: Saterfiel and Handley's conclusions at times stepped beyond the confines of the empirical evidence they presented (e.g., their conclusion of "phenomenal success" of the reading aide program with average and low-achieving students without presenting data on posttest gains for students with high and low pretest scores or any other data supporting this conclusion). The researchers also failed to consider all or most of the possible causes and solutions associated with their observation that program effects could not be detected the year after third-graders had left a classroom environment that included reading aides. This finding takes on greater significance eleven years later, when the program's long-term impact on students' achievement beyond their primary years remains in question. The researchers' observation that third-graders' achievement did not improve led them to conclude that an additional year of reading aides was warranted. Instead of assuming that more classrooms with reading aides was the solution to the absence of a carryover effect, they might have considered other explanations of their observation, including the possibility that:

- the existing design of the program was not producing long-term improvements in reading skills and a redesign of the program (e.g., better training or use of reading aides) was needed; or,
- carryover effects of the reading aide program were not observable using the measures they had included in the research design and that other measures reflective of program objectives might have been warranted; or,
- the reading aide concept in general might be ineffective in producing the anticipated long-term effects; they might have recommended further research to test this hypothesis, so that, if necessary, program funds could be redirected to an innovation with a stronger long-term impact.

A more serious problem arose when the report on this study was summarized and when the State Department of Education included information drawn from the invalid report summary in state literature on the assistant reading instructor program. While the recommendations section of the report is slightly more optimistic than the data warranted, for the most part the report itself accurately presents the evaluation results. However, instead of describing the modest gains described above, the report summary states, "In the first grades, where students had averaged at the twenty-third percentile nationally in reading before the program, students were now scoring above the national mean." This statement, the only mention of score differences with and without reading aides, implies that the data presented in the evaluation report supports a direct association between the reported score gains and this dramatic improvement, even though the report itself makes no such assertion. The research report contains no tables or comparisons showing Lee County's reading scores in 1976 or in any other pre-program year. In fact, the research itself was not designed to support a conclusion that the reading aide program was responsible for this leap in achievement over multiple years.

Perhaps the greatest strength of Saterfiel and Handley's research is the documentation of certain characteristics of the Lee County reading aide program, including Lee County teachers' extensive use of school time for instructional activities, as well as teachers' and aides' commitment to providing individual and small-group instruction in first and second grades. The researchers did not, however, describe the program in sufficient detail to permit other districts to replicate the program (e.g., the nature of the curriculum and the training that Lee County provided to teachers and aides). They also did not document that all other factors (e.g., type of curriculum, backgrounds of students, ability and enthusiasm of teachers) were held constant to ensure that the only condition that differed was the presence or absence of reading aides.

Handley's Evaluation of the Statewide Reading Improvement Program (1986)

Dr. Handley evaluated Mississippi's statewide program after it had been in effect for three years. He based his research on tests administered during the 1985-86 school year.

Design of the Study: Handley compared the scores of first-, second-, and third-graders tested in 1985-86 with the scores of prior year first-, second-, and third-graders. That is, the evaluator compared the performance of two groups who had had assistant reading instructors (1985-86 first- and second-graders) with two groups who also had had assistant reading instructors (1984-85 first- and second-graders). In addition, the evaluator compared the scores of third-graders who had had assistant reading instructors (1985-86 third-graders) with third-graders who had not had assistant reading instructors (1984-85 third-graders). Because Handley did not have comparable test data available at any of these grade levels, he compared 1985-86 Stanford Achievement Test data with converted versions of whatever 1984-85 data was available for that grade level (California Test of Basal Skills for first and second grades and California Achievement Test data for third grade).

This evaluation study also compares the first- and second-grade achievement of the same groups of students included in the third-grade comparison. That is, Handley compared three years of test data (first-, second-, and third-grade reading and math achievement) for the last group of students who did not have assistant reading instructors with the first-, second-, and third-grade achievement of the first group of students who had assistant reading instructors in their classrooms throughout their primary years. The evaluator used the results of three different tests in conducting this comparison.

Finally, in a separate volume, the evaluator reported the results of a survey of teachers and assistant teachers. The purpose of this survey was to obtain descriptive information on program implementation and to determine respondents' opinions regarding various aspects of the program.

Results of the study: Handley found that reading and mathematics achievement of 1985-86 first-graders was lower than that of 1984-85 first-graders, even though both groups had assistant reading instructors. He also noted a decline in the percentage of 1985-86 first-graders in Mississippi scoring in the highest one-fourth nationwide (also known as the upper quartile). However, in the same year fewer Mississippi first-graders fell in the lowest one-fourth nationwide (the lower quartile), an indication that more Mississippi first-graders had scored near the national average in 1985-86 than was the case the prior year.

Handley found that second-graders remained at about the same level from 1984-85 to 1985-86. Students in both groups had assistant reading instructors. He said that on average Mississippi second-graders exceeded the national average on all subtests of the 1985-86 Stanford Achievement Test, including reading, listening, and math. Handley also found that more Mississippi second-graders scored in the upper quartile and fewer scored in the lower quartile in 1985-86 compared to 1984-85 second-graders.

Results for third-graders were even more encouraging than for second-graders. After converting 1985-86 Stanford Achievement Test scores to their California Achievement Test equivalents, Handley found that Mississippi third-graders who had been taught by assistant reading instructors (1985-86 third-graders) scored higher on all eight measures of achievement than had third-graders who had not been taught by assistant reading instructors (1984-85 third-graders). Handley also found that the average 1985-86 third-grader in Mississippi met or exceeded the national average in all areas tested. In addition, more students scored in the upper quartile in 1985-86 and fewer scored in the lower quartile than was the case for 1984-85 third-graders, who had not participated in the assistant reading instructor program.

Handley's analysis of 1985-86 third-graders' performance in first and second grades (i.e., the primary grade performance of the first class to participate in the assistant reading instructor program) compared to the performance of an earlier group in the same grades showed higher achievement at each grade level for the group taught by assistant reading instructors.

Concerning the process evaluation of the program, Handley reported that over one-fourth of all teachers had not changed their teaching strategies since initiation of the assistant reading instructor program; that about one-fifth of the teachers surveyed reported that staff development related to the assistant reading instructor program was inadequate; that teachers wanted the assistant reading instructor program to be continued; and that some teachers were having communication problems with their assistants. He also found that about one-fifth of assistant reading instructors considered staff development inadequate and that assistant reading instructors frequently were used as substitutes for their own teachers and sometimes substituted for other teachers. Handley found that only 61% of the teachers surveyed thought the program would result in higher levels of student achievement, but that 88% of those surveyed predicted that the program would "result in a positive attitude toward learning by pupils."

Program administrators reported problems in interpersonal relations between teachers and assistant teachers; 82% of the administrators surveyed thought the program should be continued.

Conclusions and recommendations of the researcher: Handley concluded that "the Assistant Teacher Program in Mississippi must be pronounced highly successful in any sense." He based his conclusion primarily on the differences he found in scores between a group of third-graders taught by assistant reading instructors for three years and a group that had not been taught by assistant reading instructors in any year. He also concluded that second- and third-graders had established a stable pattern of achievement, but that first-graders' achievement had declined when compared with the achievement of earlier groups of first-graders who had been taught by assistant reading instructors. The latter finding prompted the evaluator to suggest that "a serious look needs to be taken at the instructional programs for first-graders in Mississippi." Finally, Handley concluded that "any problems in achievement which children in Mississippi are encountering now are probably more related to the need for curriculum changes than to inefficiencies in the assistant teacher program."

In addition to studying the first-grade curriculum, Handley recommended studying the effects of the program on achievement of fourth-graders, who had no assistant teachers for a year. Handley also recommended that the state be more consistent in its selection of test batteries from year to year to avoid problems in comparing scores on a variety of tests developed by different publishers.

In the process evaluation volume, Handley concluded that teachers should change their instructional techniques to utilize assistant reading instructors more effectively and that the State Department of Education should conduct a survey the following year to obtain additional information on how assistant reading instructors were being used in the classroom.

PEER Comments: A strength of the 1986 evaluation was its presentation of data on differences in achievement for third-graders who had been taught by teacher/assistant reading instructor teams throughout their primary years and third-graders who were not in classes staffed by assistant reading instructors. This information is of greater interest than the comparisons between groups of first- and second-graders, all of whom had been taught by assistant reading instructors. The before-and-after comparison for third-graders provides evidence that can be useful in determining whether the program was making a difference in student achievement at the time of the study.

However, as the evaluator himself mentioned in several comments throughout the 1986 evaluation report, a lack of comparable test data threatens the validity of all comparisons mentioned in the study, including the comparison of achievement in groups of third-graders. The State Department of Education administered different tests to different grades in each of the three years studied (Stanford Achievement Test [grades 1, 2, and 3] in 1986, California Test of Basal Skills [grades 1 and 2] and California Achievement Test [grade 3] in 1985, and California Achievement Test [grade 1] in 1984).

Because comparable test data was not available to the evaluator, it is possible that differences he noted in achievement actually were attributable to differences in the content of the tests or to error in the conversion process. For example, third-graders taught by assistant reading instructors (i.e., 1985-86 third-graders) took the Stanford Achievement Test at the end of the school year, but third-graders from the previous year (i.e., 1984-85 third-graders, who were not taught by assistant reading instructors) took the California Achievement Test as they completed third grade. The evaluator converted the 1985-86 Stanford Achievement Test data to California Achievement Test percentile rank equivalents and found substantial differences in the two groups' percentile ranks (the 46th percentile compared to the 56th percentile). Without the conversion, the difference between the groups' percentile ranks amounted to five percentile points (the 46th percentile for the group without assistant reading instructors compared to the 51st percentile for the group with assistant reading instructors). Because the tests have different content and because conversion error is inevitable, neither basis for comparing the two groups (with or without the conversion) is fully valid. Conclusions based on these comparisons should not be used as the sole basis for assessing program effectiveness. Instead, a more comprehensive evaluation would examine other outcome measures, such as students' mastery of certain basic skills as measured by criterion-referenced tests. However, Handley relied solely on incomparable test data in arriving at his conclusion that the assistant reading instructor program was responsible for dramatic improvements in the achievement of third-graders.

A related weakness in the 1986 evaluation report was the researcher's tendency to arrive at conclusions that were not supported by the data he analyzed. This tendency generally worked in favor of the program. For example, he attributed gains in achievement to the assistant reading instructor program without systematically discounting other factors that might have been fully or partially responsible for causing a change in achievement test scores from one year's third-graders to the next year's group. Examples of factors that might have been explored (and, if possible, discounted) as possible influences on achievement, independent of the assistant reading instructor program, are demographic differences between the two groups of third-graders, other programs that might have influenced one group, differences in teachers' experience, or differences in curriculum and materials.

Although the researcher attributed achievement gains to the presence of assistant reading instructors, he did not attribute declines in achievement to problems associated with the assistant reading instructor program. Instead, he concluded that some of these declines, such as those noted in first-graders' achievement, may be attributed to incomparable test data and to problems with the curriculum. The researcher did not explain his basis for asserting that changing the curriculum would address whatever condition might have caused first-graders' scores to decline.

A sampling problem also jeopardizes the validity of the evaluation findings pertaining to first- and second-grade students' achievement. The evaluator drew the sample of first- and second-grade students by including one classroom per grade for each of the 154 districts and adding another 46 classrooms at large. In the evaluator's selection of 154 of the 200 classrooms included in the study, this sampling method gave an extremely small district such as Holly Bluff equal representation (one class of first-graders and one class of second-graders) with a large district, such as the Jackson school district. This is not appropriate because Holly Bluff had enough students for only one first- and second-grade class, while Jackson had enough first- and second-graders to form 232 classes. Districts' representation in the sample should have been based on the number of students or classes in the district, not simply on their status as districts. Only in the evaluator's selection of the 46 at-large classes did each class in a large district have an equal chance for selection as each class in a small district. As a result, classes in small districts were substantially over-represented in the sample used in this evaluation and classes in large districts under-represented. Failure to select a truly representative sample biased the results of the study in favor of small districts and limited the extent to which evaluation results can be generalized statewide.

The study's lack of attention to other outcome indicators also limited its utility. The State Department of Education's literature on the assistant reading instructor program listed a reduction in dropout rates and in the rates at which students are retained in grade as anticipated benefits of the assistant reading instructor program. An analysis of the program's effect on dropouts by 1986, the year of the study, would have been of limited use because the first class of students benefiting from the program would only have reached third grade by 1986. Dropout rates generally are low until the junior high school years. However, an analysis of the program's impact on students' rates of retention in the primary grades would have been feasible at the time of the study. Such an analysis would have provided little evidence of progress toward the goal of reducing retention in grade. Exhibit 8, which provides information that, for the most part, was available in 1986, shows that the retention rate for students in classes with assistant reading instructors was approximately the same as the rate for classes that did not have assistant reading instructors. If the 1986 evaluation had provided this information, program administrators could have begun to identify and address problems associated with the program's apparent failure to reduce retention rates.

SOURCE: PEER staff analysis.

Appendix D

Enabling Legislation for Early Childhood Education Grant-in Aid Program and Reading Improvement Program
(MISS. CODE ANN. Section 37-21-7 [1972])

(1) The Mississippi Early Childhood Education Program shall be the kindergarten program implemented by local school districts under the provisions of the minimum education program.

(2) (a) Paragraphs (a), (b), (c), and (d) of this subsection shall be referred to as the "Mississippi Reading Improvement Program," the purpose of which shall be to provide an early childhood education program that assists in the instruction of basic skills. The State Board of Education is hereby authorized, empowered and directed to implement a statewide system of assistant reading instructors in kindergarten classes and in the first, second and third grades. Such assistant reading instructors shall assist pupils in actual instruction under the strict supervision of a certified teacher.

(b) Each school district shall employ the total number of assistant reading instructors funded under paragraph (d) of this subsection, and the superintendent of each district shall assign such assistant reading instructors to the kindergarten, first-, second- and third grade classes in the district in a manner that will promote the maximum efficiency in instruction, as determined by the superintendent.

(c) (i) Assistant reading instructors shall have, at the minimum, a high school diploma and shall show demonstrable proficiency in reading and writing skills.

(ii) In order to receive funding, each school district shall:
1. Submit a plan on the implementation of a reading improvement program to the State Department of Education; and
2. Develop a plan of educational accountability and assessment of performance for reading in Grades One through Six.

(iii) Additionally, each school district shall:
1. Implement an annual orientation session emphasizing program goals;
2. Hold periodic workshops for teachers on the effective use of assistant reading instructors;
3. Provide training annually on specific instructional skills for assistant reading instructors;
4. Annually evaluate their program in accordance with their educational accountability and assessment of performance plan; and

5. Designate the necessary personnel to supervise and report on their program.

(iv) The State Department of Education shall:
1. Develop and assist in the implementation of a statewide uniform training program for teachers and assistant reading instructors;
2. Annually evaluate the program through the use of an acceptable standardized testing system; and
3. Promulgate rules, regulations and such other standards deemed necessary to effectuate the purposes of this subsection.

(d) In addition to other funds allotted under the minimum education program, each school district shall be allotted Six Thousand Seven Hundred Dollars ($6,700.00) per teacher unit as prescribed in Section 37-19-5 for Grades One, Two and Three for the purpose of employing an assistant reading instructor. Assistant reading instructors shall be paid a minimum annual salary of Six Thousand Seven Hundred Dollars ($6,700.00). Provided, however, that no assistant reading instructor shall be paid less than the amount he or she received in the prior school year. No district will be eligible to receive minimum program funds under this section if during the 1994-1995 school year the local contribution to the salary of assistant reading instructors by the district is less than that paid by the district during the 1992-1993 school year. In the 1995-1996 school year and school years thereafter, no school district shall receive any funds under this section for any school year during which the aggregate amount of the local contribution to the salaries of assistant reading instructors by the district shall have been reduced below such amount for the previous year. The assistant reading instructors shall not be restricted to working only in the grades for which the funds were allotted, but may be assigned to other classes as provided in paragraph (b) of this subsection.

(3) In the event any school district meets Level 4 or 5 accreditation requirements, the State Board of Education may, in its discretion, exempt such school district from any accreditation requirements for the district's early childhood education program or reading improvement program.

SOURCE: Mississippi Code of 1972 Annotated.

Appendix E

Mississippi Reading Improvement Program Regulations (Assistant Reading Instructor Program)

1.0 Program Funding

1.1 Each school district with an approved school district operational budget shall be allotted funds to be used exclusively to compensate assistant reading instructors.

1.2 The superintendent of each district shall assign assistant reading instructors to kindergarten, first, second, and/or third grade classes in a manner that will promote the maximum efficiency in instruction.

1.3 Staff development appropriations shall be allocated to school districts on the basis of (1) the formula developed by the State Department of Education and (2) the State Department of Education's approval of the district staff development plan.

2.0 Program Evaluation: Procedures and Processes

2.1 Each school district shall conduct an annual evaluation of its program in accordance with its educational accountability and assessment of performance plan.

2.2 Each school district shall participate in any data gathering process(es) established by the State Department of Education in conjunction with the program evaluation.

3.0 Pre-employment Tests and Evaluation

3.1 Assistant reading instructor applicants must complete the reading, language arts, and written portions of a current nationally normed eighth grade standardized achievement test.

3.2 The pre-employment test must include an assessment of oral reading proficiency.

3.2.1 The assessment must determine, at a minimum, the presence of all the following characteristics of oral reading proficiency:

3.2.1.1 Correct pronunciation and phrasing.

3.2.1.2 Proper voice intonation as related to the meaning of the written passage.

3.2.1.3 Oral use of punctuation appearing in the written passage.

3.3 The test must be administered to applicants, individually or as a group, following standard testing and scoring procedures under the direction of a person knowledgeable in testing.

3.4 Applicants holding current teaching certificates for any grade(s) or subject(s) taught in the public schools are exempt from the pre-employment test battery.

3.5 Applicants who have taken the assistant reading instructor pre-employment test battery in another Mississippi public school district may submit the results of such and be exempt from the pre-employment battery. (If the submitted test battery scores do not meet the standards adopted by the receiving district, the applicant may retake any part or all of the test battery.)

4.0 Criteria for Selection

4.1 Applicants must score at or above the fiftieth percentile on tests of reading, language arts, and writing as listed in section 3.1.

4.2 Applicants must demonstrate oral language reading proficiency as indicated in section 3.2 or at a level determined by school district policy.

4.3 The district must adopt a policy stating the number of times applicants who fail to meet minimum standards may retake all or part of the test battery.

4.4 Additional years of formal education, training, and experience beyond the high school diploma can serve as additional criteria for selection of assistant reading instructor.

5.0 Personnel Records

5.1 The individual personnel file of each person employed as an assistant reading instructor must contain all the following items:

5.1.1 The employee's answer sheet and score on the test(s) of reading and language arts.

5.1.2 Documentation of the employee's high school diploma or its equivalent.

5.1.3 Where applicable, a copy of the employee's teaching certificate.

5.1.4 A summary of the assistant reading instructor's salary, responsibilities, and expectations signed by the employee to indicate that the information has been reviewed with the employee.

5.1.5 A copy of the annual evaluation and staff development training record.

6.0 Assistant Reading Instructor Role

6.1 Assistant reading instructors shall be included in the district staff development program and participate in the approved district program. Staff development credits offered must comply with staff development guidelines for assistant reading instructors.

6.2 The teacher and assistant reading instructor are to have a minimum of thirty (30) minutes per week together for instructional planning.

6.3 The assistant reading instructor will be supervised by the certified teacher(s) to whom she/he is assigned.

6.4 The assistant reading instructor shall comply with district policies and procedures.

6.5 All duties that the assistant reading instructor will be asked to perform must be explained at the time of employment.

6.6 The assistant reading instructor may be used in lieu of a substitute for the teacher to which she/he is assigned. The assistant reading instructor may assume the sole responsibility of the classroom for no more than three consecutive days.

6.7 The assistant reading instructor shall not be used as a substitute for teachers other than the one she/he is assigned.

6.8 An exception to 6.7 may be made in emergency situations for a portion of the school day.

6.9 To clarify "maximum efficiency in instruction, as determined by the superintendent," the assistant reading instructors are to remain with the teacher to whom they have been assigned in kindergarten and first grade for the duration of the school day.

7.0 Due Process Procedures

7.1 The school district must establish a grievance procedure or use one already developed in the event a grievance develops between the assistant reading instructor and the school district or district staff. Assistant reading instructors must follow established district grievance procedures in filing a complaint.

8.0 Performance Evaluation

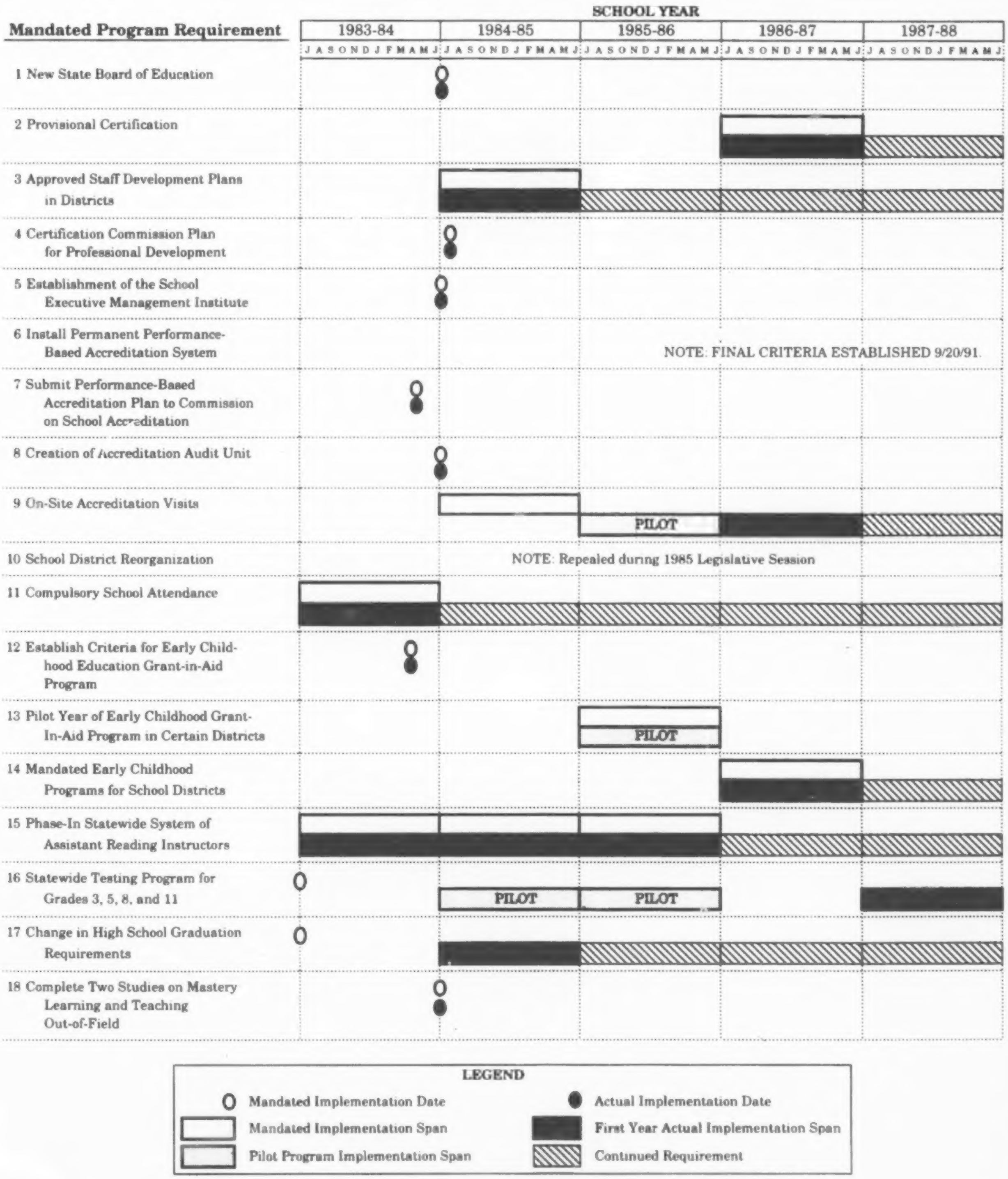
8.1 A yearly evaluation of the assistant reading instructor is to be conducted in a manner prescribed by the local school district to determine successful job performance.

8.2 The evaluation of the assistant reading instructor shall involve input from the principal and supervising teacher.

SOURCE: *Mississippi Reading Improvement Program Regulations (Assistant Reading Instructor Program), Winter 1993*, as adopted by the State Board of Education on April 15, 1994

Appendix F

Implementation of Education Reform Act Requirements
(For Period June 1983 - August 1988)



SOURCE: Compiled by PEER staff from information provided by the State Department of Education.

Appendix G

Assistant Reading Instructor Profile
By District, 1990 - 1994

District (Alphabetical Order)	1989-1990 Percent Male	1989-1990 Percent Female	1989-1990 Avg. Years Experience	1990-91 Percent Male	1990-91 Percent Female	1990-91 Avg. Years Experience	Percent Male
Aberdeen	0.0	100.0	4.5	0.0	100.0	5.2	0.0
Alcorn	0.0	100.0	4.1	0.0	100.0	4.1	2.9
Amite County	0.0	100.0	5.4	0.0	100.0	6.2	0.0
Amory	0.0	100.0	7.1	0.0	100.0	7.4	0.0
Anguilla	0.0	100.0	3.6	0.0	100.0	4.6	0.0
Attala County	0.0	100.0	6.5	0.0	100.0	7.6	0.0
Baldwyn	0.0	100.0	4.6	0.0	100.0	4.5	0.0
Bay St. Louis - Waveland	0.0	100.0	5.4	0.0	100.0	4.6	0.0
Benoit	0.0	100.0	3.3	0.0	100.0	4.3	0.0
Benton County	0.0	100.0	3.8	0.0	100.0	4.5	0.0
Biloxi	0.0	100.0	4.1	0.0	100.0	4.6	1.3
Booneville	0.0	100.0	2.2	0.0	100.0	1.7	0.0
Brookhaven	0.0	100.0	5.0	0.0	100.0	4.7	0.0
Calhoun County	0.0	100.0	6.4	0.0	100.0	6.0	0.0
Canton	2.6	97.4	2.6	0.0	100.0	3.1	2.6
Carroll County	0.0	100.0	8.1	0.0	100.0	9.4	0.0
Chickasaw County	0.0	100.0	6.2	0.0	100.0	4.6	0.0
Choctaw County	0.0	100.0	6.1	0.0	100.0	6.4	0.0
Claiborne County	9.7	90.3	4.6	10.3	89.7	5.3	11.1
Clarksdale	1.8	98.2	3.1	1.7	98.3	3.4	1.8
Clay County	0.0	100.0	3.7	0.0	100.0	4.7	0.0
Cleveland	0.0	100.0	2.1	0.0	100.0	2.4	0.0
Clinton	0.0	100.0	3.4	1.9	98.1	3.1	0.0
Coahoma County	0.0	100.0	6.6	0.0	100.0	7.2	0.0
Coffeeville	0.0	100.0	2.1	0.0	100.0	2.1	0.0
Columbia	0.0	100.0	3.4	0.0	100.0	4.2	0.0
Columbus	0.0	100.0	4.2	0.0	100.0	3.9	0.0
Copiah County	0.0	100.0	6.9	0.0	100.0	7.5	0.0
Corinth	0.0	100.0	3.6	0.0	100.0	3.8	0.0
Covington County	0.0	100.0	4.3	0.0	100.0	4.3	0.0
DeSoto County	0.0	100.0	2.5	1.3	98.7	2.2	0.7
Drew	14.3	85.7	6.6	14.3	85.7	8.0	15.4
Durant	0.0	100.0	7.1	0.0	100.0	7.8	0.0
East Jasper	0.0	100.0	7.6	0.0	100.0	8.1	6.3
East Tallahatchie	0.0	100.0	3.2	0.0	100.0	3.5	0.0
Enterprise	0.0	100.0	2.9	0.0	100.0	3.1	0.0
Forest	0.0	100.0	5.2	0.0	100.0	4.1	0.0
Forrest County	0.0	100.0	4.4	0.0	100.0	4.5	0.0
Franklin County	0.0	100.0	6.0	0.0	100.0	5.4	0.0
George County	0.0	100.0	5.5	0.0	100.0	5.4	0.0
Greene County	0.0	100.0	4.2	0.0	100.0	4.5	-NA-
Greenville	0.0	100.0	2.4	0.9	99.1	2.6	1.8
Greenwood	0.0	100.0	4.6	0.0	100.0	4.4	2.1
Grenada	0.0	100.0	3.9	0.0	100.0	3.5	0.0
Gulfport	0.0	100.0	6.1	0.0	100.0	6.2	0.0
Hancock County	0.0	100.0	5.6	0.0	100.0	5.6	0.0
Harrison County	0.0	100.0	2.7	1.8	98.2	3.1	0.0
Hattiesburg	1.6	98.4	2.6	3.4	96.6	2.9	3.6

SOURCE: PEER analysis of State Department of Education records.

1991-92			**1992-93**			**1993-94**		**90-94**
Percent Female	Avg. Years Experience	Percent Male	Percent Female	Avg. Years Experience	Percent Male	Percent Female	Avg. Years Experience	Turnover Rate
100.0	5.2	0.0	100.0	5.7	4.8	95.2	7.2	61.54
97.1	5.0	0.0	100.0	5.2	0	100	5.4	57.14
100.0	6.5	0.0	100.0	7.2	0	100	7	47.83
100.0	6.8	0.0	100.0	7.7	0	100	7.3	46.67
100.0	5.2	-NA-	-NA-	-NA-	-NA-	-NA-	-NA-	-NA-
100.0	8.9	0.0	100.0	7.6	0	100	8.2	64.71
100.0	5.4	0.0	100.0	3.7	0	100	3	72.73
100.0	4.3	0.0	100.0	5.3	0	100	6	56.52
100.0	3.5	0.0	100.0	3.4	0	100	2.8	50.00
100.0	5.1	0.0	100.0	4.9	0	100	4.5	64.71
98.7	4.6	0.0	100.0	5.3	1.4	98.6	5.2	59.72
100.0	2.2	0.0	100.0	2.1	0	100	2	76.92
100.0	6.3	0.0	100.0	5.6	0	100	6.5	59.09
100.0	6.4	0.0	100.0	6.2	0	100	7.5	25.93
97.4	3.4	5.0	95.0	2.8	2.5	97.5	3.1	63.16
100.0	9.2	0.0	100.0	11.4	0	100	11.1	33.33
100.0	6.6	0.0	100.0	6.0	0	100	7	83.33
100.0	6.8	0.0	100.0	6.8	0	100	8.2	54.55
88.9	6.4	10.3	89.7	7.3	10.7	89.3	8.4	16.13
98.2	3.9	1.8	98.2	4.1	2	98	4.8	50.00
100.0	5.3	0.0	100.0	4.7	0	100	6.5	63.64
100.0	2.2	0.0	100.0	2.7	0	100	3.5	69.81
100.0	4.1	0.0	100.0	4.3	0	100	3.1	74.00
100.0	5.4	0.0	100.0	5.7	0	100	6.4	57.58
100.0	3.9	0.0	100.0	4.2	21.4	78.6	3	80
100.0	5.2	0.0	100.0	5.7	0	100	5.5	52.17
100.0	4.2	0.0	100.0	4.6	0	100	4.4	61.90
100.0	8.6	0.0	100.0	7.1	2.8	97.2	7.9	55.56
100.0	4.2	0.0	100.0	2.8	0	100	3.3	57.14
100.0	3.9	0.0	100.0	3.4	0	100	3.2	65.79
99.3	2.5	0.0	100.0	2.7	0	100	3.2	72.93
84.6	8.8	8.3	91.7	7.6	7.7	92.3	6.8	50
100.0	5.1	0.0	100.0	6.1	0	100	5.3	87.50
93.8	9.0	0.0	100.0	8.1	0	100	10.3	31.25
100.0	4.7	0.0	100.0	4.1	0	100	4.7	68.42
100.0	1.8	0.0	100.0	1.4	0	100	3.1	70.00
100.0	4.1	0.0	100.0	4.4	0	100	4.6	70
100.0	4.4	0.0	100.0	4.5	0	100	5.4	58.82
100.0	5.5	0.0	100.0	6.1	4.8	95.2	6.3	52.17
100.0	5.9	0.0	100.0	5.2	0	100	5.9	54.29
-NA-	-NA-	0.0	100.0	5.0	0	100	4.6	56.52
98.2	2.6	1.0	99.0	3.1	3.4	96.6	3.3	63.27
97.9	5.1	6.0	94.0	5.3	6.8	93.2	5.7	46.00
100.0	4.2	0.0	100.0	4.2	0	100	3.5	58.14
100.0	6.3	0.0	100.0	6.7	1.5	98.5	6.5	48.33
100.0	5.7	0.0	100.0	5.8	0	100	5.1	44.00
100.0	3.5	0.8	99.2	3.0	0.8	99.2	3.7	62.04
96.4	2.8	3.7	96.3	3.3	7	93	3.4	65.57

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Appendix G (continued)

	1989-1990			1990-91			
District (Alphabetical Order)	Percent Male	Percent Female	Avg. Years Experience	Percent Male	Percent Female	Avg. Years Experience	Percent Male
Hazlehurst	0.0	100.0	5.4	0.0	100.0	6.0	0.0
Hinds County	0.0	100.0	3.0	1.6	98.4	3.7	0.0
Hollandale	6.7	93.3	8.6	6.3	93.8	5.9	6.7
Holly Bluff	0.0	100.0	5.5	-NA-	-NA-	-NA-	-NA-
Holly Springs	0.0	100.0	5.3	0.0	100.0	6.3	0.0
Holmes County	4.0	96.0	8.6	4.3	95.7	9.0	2.2
Houston	0.0	100.0	3.2	0.0	100.0	3.9	0.0
Humphreys County	9.1	90.9	5.3	0.0	100.0	5.2	0.0
Indianola	2.6	97.4	2.8	2.7	97.3	3.3	3.0
Itawamba County	0.0	100.0	4.2	0.0	100.0	4.4	0.0
Iuka	0.0	100.0	4.0	0.0	100.0	4.9	-NA-
Jackson	3.3	96.7	3.5	2.6	97.4	4.0	2.5
Jackson County	0.0	100.0	3.2	0.0	100.0	4.1	0.0
Jefferson County	0.0	100.0	8.7	0.0	100.0	8.9	0.0
Jefferson Davis County	3.0	97.0	8.9	3.1	96.9	9.3	0.0
Jones County	0.0	100.0	4.1	0.0	100.0	4.1	0.0
Kemper County	0.0	100.0	4.1	0.0	100.0	5.0	0.0
Kosciusko	0.0	100.0	4.8	0.0	100.0	3.5	0.0
Lafayette County	0.0	100.0	3.4	0.0	100.0	3.7	0.0
Lamar County	0.0	100.0	3.0	0.0	100.0	3.9	0.0
Lauderdale County	0.0	100.0	3.4	0.0	100.0	4.2	1.5
Laurel	0.0	100.0	5.7	0.0	100.0	5.6	2.9
Lawrence County	0.0	100.0	7.0	0.0	100.0	7.6	0.0
Leake County	0.0	100.0	4.4	0.0	100.0	4.3	0.0
Lee County	0.0	100.0	3.8	0.0	100.0	3.6	0.0
Leflore County	2.2	97.8	5.6	0.0	100.0	6.2	2.8
Leland	0.0	100.0	4.6	0.0	100.0	5.1	0.0
Lincoln County	0.0	100.0	4.7	0.0	100.0	5.4	0.0
Long Beach	0.0	100.0	5.3	0.0	100.0	3.4	0.0
Louisville	2.5	97.5	3.1	4.9	95.1	3.5	0.0
Lowndes County	0.0	100.0	5.4	0.0	100.0	5.8	1.8
Lumberton	0.0	100.0	5.3	0.0	100.0	5.7	0.0
Madison County	1.8	98.2	2.0	3.7	96.3	2.5	1.6
Marion County	0.0	100.0	5.8	0.0	100.0	6.4	0.0
Marshall County	0.0	100.0	3.9	0.0	100.0	4.4	0.0
McComb	0.0	100.0	3.1	0.0	100.0	3.6	0.0
Meridian	1.3	98.8	6.0	0.0	100.0	6.4	1.2
Monroe County	0.0	100.0	3.7	0.0	100.0	3.9	0.0
Montgomery County	0.0	100.0	3.7	0.0	100.0	4.7	0.0
Moss Point	0.0	100.0	5.4	0.0	100.0	5.9	0.0
Mound Bayou	7.1	92.9	2.5	0.0	100.0	3.4	0.0
Natchez Adams	0.0	100.0	5.3	1.5	98.5	5.7	0.0
Neshoba County	0.0	100.0	2.5	0.0	100.0	3.2	0.0
Nettleton	0.0	100.0	3.8	0.0	100.0	3.6	0.0
New Albany	5.0	95.0	5.5	0.0	100.0	4.5	0.0
Newton	0.0	100.0	2.4	0.0	100.0	3.1	0.0
Newton County	0.0	100.0	2.9	0.0	100.0	2.8	0.0
North Bolivar	0.0	100.0	3.5	0.0	100.0	3.4	0.0
North Panola	3.7	96.3	4.4	3.7	96.3	4.3	0.0
North Pike	0.0	100.0	2.6	0.0	100.0	3.5	0.0
North Tippah	0.0	100.0	3.9	0.0	100.0	5.2	0.0
Noxubee County	7.1	92.9	4.3	7.1	92.9	5.4	7.4
Ocean Springs	0.0	100.0	2.5	0.0	100.0	2.7	0.0

1991-92 Percent Female	Avg. Years Experience	Percent Male	1992-93 Percent Female	Avg. Years Experience	Percent Male	1993-94 Percent Female	Avg. Years Experience	90-94 Turnover Rate
100.0	7.0	0.0	100.0	7.5	0	100	7.7	45.00
100.0	5.0	1.7	98.3	5.1	1.9	98.1	5.2	67.19
93.3	5.7	5.9	94.1	5.6	6.3	93.8	7.4	43.75
-NA-	-NA-	-NA-	-NA-	-NA-	-NA-	-NA-	-NA-	-NA-
100.0	5.0	0.0	100.0	5.1	0	100	6.7	60.00
97.8	10.2	2.2	97.8	11.4	4.1	95.9	9.1	46.00
100.0	4.6	0.0	100.0	3.8	0	100	3.8	47.62
100.0	5.2	0.0	100.0	5.4	0	100	4.9	60.61
97.0	4.0	3.1	96.9	4.5	0	100	3.6	56.41
100.0	4.5	0.0	100.0	5.3	0	100	5.9	46.88
-NA-	-NA-	-NA-	-NA-	-NA-	-NA-	-NA-	-NA-	-NA-
97.5	5.0	1.4	98.6	6.0	1.8	98.2	5.9	64.23
100.0	4.3	1.5	98.5	4.0	1.5	98.5	4.6	56.06
100.0	9.1	0.0	100.0	6.9	0	100	8.2	64.00
100.0	9.0	0.0	100.0	9.6	0	100	10.1	48.48
100.0	4.6	0.0	100.0	4.8	0	100	5.6	53.68
100.0	5.5	0.0	100.0	6.4	0	100	6.8	42.11
100.0	2.5	0.0	100.0	3.0	0	100	3.1	70.00
100.0	4.2	0.0	100.0	5.6	4.8	95.2	4.2	70.00
100.0	4.2	0.0	100.0	4.2	0	100	4.6	53.33
98.5	4.9	0.0	100.0	5.4	0	100	5.6	47.06
97.1	4.4	2.9	97.1	5.1	2.9	97.1	4.9	68.57
100.0	7.4	0.0	100.0	7.7	0	100	8.9	34.48
100.0	3.6	0.0	100.0	4.3	0	100	5.3	54.55
100.0	4.6	1.7	98.3	5.1	1.6	98.4	5.4	54.39
97.2	5.5	2.9	97.1	5.9	3.1	96.9	5.7	69.57
100.0	5.4	0.0	100.0	6.6	0	100	8.1	52.63
100.0	5.5	0.0	100.0	6.6	0	100	6.5	42.31
100.0	3.0	0.0	100.0	3.7	0	100	3.8	69.70
100.0	3.6	0.0	100.0	4.2	0	100	4.4	65
98.2	6.2	5.1	94.9	6.4	0	100	7.1	37.29
100.0	6.7	0.0	100.0	7.6	0	100	6.2	88.89
98.4	2.2	1.4	98.6	2.2	1.3	98.7	2	67.86
100.0	6.8	3.2	96.8	7.4	0	100	8.3	39.39
100.0	4.3	0.0	100.0	5.3	3.1	96.9	5.2	58.33
100.0	5.0	0.0	100.0	2.4	0	100	3.1	67.57
98.8	6.3	3.5	96.5	5.8	0	100	7.6	48.75
100.0	4.3	0.0	100.0	4.5	0	100	5.8	44.83
100.0	5.1	0.0	100.0	5.8	0	100	5.5	54.55
100.0	5.8	2.0	98.0	5.5	1.9	98.1	5	59.26
100.0	3.2	0.0	100.0	3.9	0	100	4.2	71.43
100.0	5.1	0.0	100.0	7.2	3.6	96.4	8.1	49.18
100.0	3.0	0.0	100.0	3.3	0	100	3	43.33
100.0	3.1	0.0	100.0	3.5	0	100	3	84.21
100.0	5.2	0.0	100.0	5.3	0	100	5.9	65
100.0	3.1	0.0	100.0	2.4	0	100	3.9	70.59
100.0	3.4	0.0	100.0	4.3	0	100	4.8	55.56
100.0	4.4	7.1	92.9	4.6	0	100	7.5	41.67
100.0	3.9	0.0	96.4	4.5	3.7	96.3	5.5	55.56
100.0	4.0	0.0	100.0	3.6	0	100	4	42.86
100.0	6.3	0.0	100.0	6.6	0	100	6.8	40
92.6	7.3	3.7	96.3	8.6	3.4	96.6	7	62.96
100.0	3.1	0.0	100.0	3.2	0	100	3.7	50.00

Appendix G (continued)

District (Alphabetical Order)	Percent Male	1989-1990 Percent Female	Avg. Years Experience	Percent Male	1990-91 Percent Female	Avg. Years Experience	Percent Male
Okolona	0.0	100.0	5.0	0.0	100.0	4.5	0.0
Oktibbeha County	5.0	95.0	3.4	9.5	90.5	3.2	10.0
Oxford	6.7	93.3	3.5	0.0	100.0	3.4	0.0
Pascagoula	0.0	100.0	5.8	1.3	98.7	6.4	0.0
Pass Christian	0.0	100.0	3.9	0.0	100.0	4.9	0.0
Pearl	0.0	100.0	3.3	0.0	100.0	3.8	4.3
Pearl River County	0.0	100.0	3.2	0.0	100.0	3.1	0.0
Perry County	0.0	100.0	0.9	0.0	100.0	5.2	0.0
Petal	0.0	100.0	3.1	0.0	100.0	3.0	0.0
Philadelphia	0.0	100.0	1.8	0.0	100.0	1.7	0.0
Picayune	2.2	97.8	2.2	0.0	100.0	2.5	0.0
Pontotoc	0.0	100.0	3.6	0.0	100.0	3.1	0.0
Pontotoc County	0.0	100.0	4.3	0.0	100.0	5.0	0.0
Poplarville	0.0	100.0	4.5	0.0	100.0	5.5	0.0
Prentiss County	0.0	100.0	4.0	0.0	100.0	4.2	0.0
Quitman	0.0	100.0	2.5	0.0	100.0	2.6	0.0
Quitman County	0.0	100.0	4.3	0.0	100.0	2.7	0.0
Rankin County	1.3	98.7	2.6	0.8	99.2	2.4	0.0
Richton	0.0	100.0	3.4	0.0	100.0	4.4	0.0
Scott County	2.4	97.6	4.6	2.6	97.4	4.4	0.0
Senatobia	0.0	100.0	2.4	0.0	100.0	2.4	0.0
Shaw	0.0	100.0	7.6	0.0	100.0	8.1	0.0
Simpson County	0.0	100.0	6.7	0.0	100.0	7.3	0.0
Smith County	0.0	100.0	4.1	0.0	100.0	4.7	0.0
South Delta	0.0	100.0	6.1	6.3	93.8	5.9	7.1
South Panola	0.0	100.0	3.2	0.0	100.0	3.6	0.0
South Pike	0.0	100.0	3.3	3.3	96.7	2.7	4.0
South Tippah	3.2	96.8	3.9	3.8	96.2	4.9	3.8
Starkville	0.0	100.0	2.2	0.0	100.0	2.4	0.0
Stone County	0.0	100.0	2.9	0.0	100.0	4.1	0.0
Sunflower County	2.9	97.1	6.3	2.9	97.1	4.1	3.6
Tate County	2.6	97.4	5.6	2.8	97.2	5.4	0.0
Tishomingo County	0.0	100.0	4.2	0.0	100.0	4.6	0.0
Tunica	0.0	100.0	10.4	0.0	100.0	10.3	0.0
Tupelo	0.0	100.0	4.4	0.0	100.0	3.6	0.0
Union	0.0	100.0	2.3	0.0	100.0	3.0	0.0
Union County	0.0	100.0	3.6	0.0	100.0	4.5	0.0
Vicksburg Warren	0.0	100.0	3.3	0.0	100.0	3.7	1.0
Walthall County	0.0	100.0	6.0	0.0	100.0	6.8	0.0
Water Valley	0.0	100.0	2.6	0.0	100.0	3.4	0.0
Wayne County	0.0	100.0	3.1	4.4	95.6	3.0	0.0
Webster County	0.0	100.0	6.1	0.0	100.0	5.0	0.0
West Bolivar	0.0	100.0	4.4	0.0	100.0	4.6	0.0
West Jasper	0.0	100.0	4.3	0.0	100.0	4.2	0.0
West Point	0.0	100.0	6.3	0.0	100.0	5.8	0.0
West Tallahatchie	4.5	95.5	2.6	5.6	94.4	3.5	0.0
Western Line	0.0	100.0	1.9	0.0	100.0	2.8	0.0
Wilkinson County	0.0	100.0	2.7	0.0	100.0	2.0	0.0
Winona	0.0	100.0	5.9	0.0	100.0	6.3	0.0
Yazoo City	0.0	100.0	2.9	0.0	100.0	3.3	0.0
Yazoo County	0.0	100.0	5.6	0.0	100.0	9.1	0.0
Statewide Totals	**0.9**	**99.1**	**4.1**	**1.0**	**99.0**	**4.4**	**0.8**

1991-92			**1992-93**			**1993-94**		**90-94**
Percent Female	Avg. Years Experience	Percent Male	Percent Female	Avg. Years Experience	Percent Male	Percent Female	Avg. Years Experience	Turnover Rate
100.0	3.5	0.0	100.0	1.1	0	100	2.8	61.54
90.0	4.3	11.1	88.9	4.9	5.9	94.1	4.6	55.56
100.0	4.5	7.7	92.3	4.3	7.7	92.3	4.2	62.07
100.0	6.5	0.0	100.0	6.2	0	100	6.1	50.00
100.0	5.5	0.0	100.0	5.7	0	100	6.2	50.00
95.7	3.8	2.5	97.5	4.3	0	100	5.3	47.62
100.0	3.9	0.0	100.0	4.1	0	100	5.6	38.89
100.0	7.7	0.0	100.0	8.6	0	100	10.1	38.89
100.0	3.5	0.0	100.0	3.4	0	100	3.3	59.26
100.0	2.2	0.0	100.0	2.4	0	100	2.5	69.23
100.0	3.3	0.0	100.0	2.7	0	100	2.6	73.33
100.0	3.2	0.0	100.0	3.4	0	100	3.7	61.11
100.0	4.9	0.0	100.0	6.2	0	100	6.5	34.62
100.0	7.0	0.0	100.0	5.0	0	100	5.9	57.89
100.0	4.6	3.4	96.6	4.8	4	96	5.9	48
100.0	1.8	0.0	100.0	2.8	0	100	2.5	68.75
100.0	3.1	5.6	94.4	2.6	5.6	94.4	2.5	83.33
100.0	2.8	0.0	99.2	2.6	0.8	99.2	3.1	78.91
100.0	4.8	0.0	100.0	4.9	0	100	5.4	20.00
100.0	4.3	0.0	100.0	5.1	0	100	5.3	43.9
100.0	1.9	0.0	100.0	1.9	0	100	2.3	61.11
100.0	5.9	0.0	100.0	6.4	0	100	6.8	60.00
100.0	7.2	0.0	100.0	7.1	0	100	6.6	43.48
100.0	4.8	0.0	100.0	4.9	0	100	5.2	57.58
92.9	6.2	5.3	94.7	6.5	5.3	94.7	8.1	46.67
100.0	3.7	0.0	100.0	4.1	0	100	4.5	62.00
96.0	3.9	4.0	96.0	4.5	3.6	96.4	4.5	51.72
96.2	5.4	10.7	89.3	5.3	3.7	96.3	5.8	45.16
100.0	2.8	0.0	100.0	3.2	0	100	3.9	57.69
100.0	3.3	0.0	100.0	3.3	0	100	3.6	60.87
96.4	5.4	3.1	96.9	5.9	6.1	93.9	5.5	58.82
100.0	4.2	0.0	100.0	5.9	2.9	97.1	5.9	74.36
100.0	4.4	0.0	100.0	4.9	0	100	4.7	36.84
100.0	8.2	0.0	100.0	8.3	10.5	89.5	8.4	84.21
100.0	3.9	0.0	100.0	3.8	0	100	3.6	73.53
100.0	2.4	0.0	100.0	1.8	0	100	2.5	66.67
100.0	5.5	0.0	100.0	4.4	0	100	4.2	57.69
99.0	3.6	1.1	98.9	4.8	1	99	4.7	65.74
100.0	5.5	0.0	100.0	6.3	0	100	7.3	61.76
100.0	4.1	0.0	100.0	5.5	0	100	5	50
100.0	3.4	0.0	100.0	4.0	2.1	97.9	4.4	48.89
100.0	6.0	0.0	100.0	5.6	0	100	6.1	55
100.0	5.5	0.0	100.0	4.0	0	100	3.7	73.68
100.0	4.4	0.0	100.0	2.4	0	100	4.2	76.19
100.0	6.0	0.0	100.0	4.5	0	100	4.9	61.54
100.0	2.7	5.9	94.1	3.5	0	100	4.8	59.09
100.0	2.8	0.0	100.0	2.5	0	100	3.5	60.87
100.0	2.2	0.0	100.0	3.2	0	100	4.3	65.22
100.0	6.8	0.0	100.0	6.9	0	100	7.9	47.06
100.0	3.4	0.0	100.0	3.6	0	100	2.9	69.23
100.0	9.2	0.0	100.0	7.1	0	100	7.3	58.82
99.1	**4.6**	**1.0**	**99.0**	**4.9**	**1.3**	**98.7**	**5.1**	**58.52**

Appendix H

Description of the Minimum Foundation Program

During the 1953 extraordinary session, the Legislature passed an omnibus school reform package, which included the Minimum Foundation Program, in response to the need for equity in the funding of school districts and to improve the quality of educational opportunities in the state. Mississippi's Minimum Education Program, generally known as the Minimum Program, is the program of education made possible by a financing plan set forth in MISS. CODE ANN. Sections 37-19-5 through 37-19-33. This financing plan provides state general funds for teachers' salaries, administrative expenses, transportation, supportive services, and the employer's part of state employees' retirement and Social Security.

Minimum Program statutes require that the Department of Education allot Minimum Program funds to each school district based on the number of teacher units to which the district is entitled. The Department of Education divides a school district's kindergarten through fourth-grade average daily attendance by twenty-four to arrive at the lower elementary teacher unit entitlement and divides the fifth-grade through twelfth-grade average daily attendance by twenty-seven to arrive at the district's upper elementary and secondary teacher unit entitlement.

In addition to reporting average daily attendance, each school district reports the level of certification and years of experience of each of its teachers. In accordance with Minimum Program provisions, the Department of Education funds specific teachers' salaries and fringe benefits on the basis of this information, instead of allocating a standard amount per teacher unit. To assume the greatest cost burden in funding the designated number of teacher units, the department provides funds for the specified number of teachers, starting with teachers with the highest level of certification and the greatest number of years of experience and continuing to those teachers with lower levels of certification and fewer years of experience.

SOURCE: PEER analysis of MISS. CODE ANN. Section 37-19-5 through 37-19-33.

Appendix I

Method for Estimating the Number of Students Served by Assistant Reading Instructors for the 1993-94 School Year

To estimate the number of students served by assistant reading instructors for the 1993-94 school year, PEER staff first assumed that although districts earn assistant reading instructors based on teacher units in grades 1 through 3, the districts are first using the assistants to serve all children in grades K through 2, then using any remaining assistants to serve children in the third grade. The 1994 *Annual Report of the State Superintendent of Education* reported the following fall enrollment data for grades K through 2:

Kindergarten	36,291
1	41,467
2	39,080
Total	116,838

To estimate the number of third-grade students served by assistant reading instructors, PEER calculated the difference between the number of teacher units earned for third-grade enrollment versus the number of teacher units (assistant reading instructors) needed to serve kindergarten (average daily attendance), as follows:

Third Grade	(37,510/24)	1,563
Kindergarten	(34,372/24)	1,432
Extra teacher units available		131

Multiplying the 131 teacher units by the maximum number of third-grade students per class allowed without petitioning the State Board of Education for an exception, 27, yielded an estimate of 3,537 full time equivalent students served by assistant reading instructors in the third grade. Adding 3,537 to the previous estimate of 116,838 students served in grades K through 2 resulted in an estimated number of students served by assistant reading instructors in grades K through 3 of **120,375**.

SOURCE: PEER analysis of data from 1994 *Annual Report of the State Superintendent of Education*.

Appendix J

Method for Computing the Amount of Assistant Reading Instructor Salaries Paid by Local School Districts

Because the State Department of Education does not report which portion of salaries is state funded and which portion is locally funded in its personnel report, PEER had to estimate the portion of the total paid from each funding source. PEER's goal was to determine how much of each Assistant Reading Instructor's salary was paid by the local school district.

The data supplied by the Department of Education contained the total yearly salary amount paid to each assistant reading instructor, which included state and local salary funds for work performed as assistant reading instructors, as well as any salary money paid for work in other capacities--e.g., bus driver. Because some assistant reading instructors were employed for part of the school year and some had other duties, such as serving as school bus drivers, PEER could not simply subtract the minimum program salary amount paid to the assistants for relevant years from the total salary reported by the State Department of Education to calculate the local portion in all cases. Therefore, PEER used the following four algorithms:

- If the Assistant Reading Instructor worked the entire school year and was an Assistant Reading Instructor only, PEER subtracted the Minimum Program amount in effect for that school year from the Assistant Reading Instructor's total salary. This amount should be accurate if the other data for this Assistant Reading Instructor is accurate.

- If the Assistant Reading Instructor worked only part of the school year and was an Assistant Reading Instructor only, PEER prorated the Minimum Program amount and subtracted this from the total salary. This amount should be accurate if the other data for this Assistant Reading Instructor is accurate.

- If the Assistant Reading Instructor worked the entire school year and had other duties, PEER computed the median of the total salaries for Assistant Reading Instructors in that school district in that school year for the whole school year and subtracted the Minimum Program amount from the median salary. This amount is only an approximation.

- If the Assistant Reading Instructor worked only part of the school year and had other duties, PEER prorated the Minimum Program amount and computed the median of the total salaries for Assistant Reading Instructors in that school district in that school year for the entire school year and subtracted the prorated minimum program amount from the median salary. This amount is only an approximation.

SOURCE: PEER staff.

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Appendix K

State and Local School District Contributions to Assistant Reading Instructor Salaries - Full Time Equivalent Positions (FTE) 1990-1994

	1989-90				1990-91				
District (Alphabetical Order)	State Salary	District Salary *	FTE	District Salary per FTE	State Salary	District Salary *	FTE	District Salary per FTE	State Salary
Aberdeen	158,600.00	2,000.00	26.00	76.92	152,467.20	2,000.80	24.99	80.05	144,661.83
Alcorn	254,716.22	28,674.78	41.76	686.71	232,410.00	30,534.00	38.10	801.42	213,500.00
Amite County	137,167.57	17,401.43	22.49	773.86	128,100.00	16,275.00	21.00	775.00	128,100.00
Amory	91,500.00	6,200.00	15.00	413.33	109,800.00	24,250.00	18.00	1,347.22	97,600.00
Anguilla	42,700.00	1,455.00	7.00	207.86	42,700.00	4,109.00	7.00	587.00	36,600.00
Attala County	97,929.73	4,875.00	16.05	303.66	91,082.63	6,685.37	14.93	447.73	85,300.00
Baldwyn	67,100.00	9,075.00	11.00	825.00	67,100.00	7,425.00	11.00	675.00	61,000.00
Bay St. Louis-Waveland	138,321.62	23,511.38	22.68	1,036.85	195,200.00	43,900.00	32.00	1,371.88	187,210.33
Benoit	24,400.00	0.00	4.00	0.00	24,400.00	0.00	4.00	0.00	24,400.00
Benton County	101,556.76	6,679.54	16.65	401.21	94,719.44	5,222.22	15.53	336.31	93,363.89
Biloxi	439,200.00	59,181.00	72.00	821.96	469,700.00	98,224.00	77.00	1,275.64	455,676.63
Booneville	73,030.56	2,931.56	11.97	244.86	73,200.00	2,650.00	12.00	220.83	61,000.00
Brookhaven	268,400.00	0.00	44.00	0.00	244,000.00	0.00	40.00	0.00	225,634.05
Calhoun County	164,700.00	0.00	27.00	0.00	170,800.00	6,832.00	28.00	244.00	164,700.00
Canton	231,800.00	12,920.00	38.00	340.00	236,236.36	17,037.64	37.81	450.60	221,655.08
Carroll County	86,224.32	32.68	14.14	2.31	85,400.00	0.00	14.00	0.00	85,400.00
Chickasaw County	36,600.00	3,402.00	6.00	567.00	40,356.32	3,870.68	6.16	628.85	28,705.88
Choctaw County	134,200.00	0.00	22.00	0.00	122,000.00	0.00	20.00	0.00	128,100.00
Claiborne County	189,100.00	219,484.00	31.00	7,080.13	176,900.00	206,944.00	29.00	7,136.00	166,513.51
Clarksdale	316,210.81	0.00	51.84	0.00	353,305.41	0.00	57.92	0.00	334,675.68
Clay County	49,954.05	0.00	8.19	0.00	48,865.95	0.00	8.01	0.00	41,512.97
Cleveland	291,975.68	12,595.54	47.86	263.15	291,886.63	14,653.37	47.85	306.23	277,615.59
Clinton	298,900.00	37,634.00	49.00	768.04	301,392.47	35,379.53	49.41	716.06	280,272.04
Coahoma	183,989.19	0.81	30.16	0.03	179,702.70	12,297.30	29.46	417.43	163,941.62
Coffeeville	59,681.08	3,247.92	9.78	331.97	54,900.00	2,100.00	9.00	233.33	54,900.00
Columbia	134,200.00	10,426.95	22.00	473.95	135,387.03	12,187.97	22.19	549.14	128,100.00
Columbus	378,859.46	119,048.54	62.11	1,916.80	378,363.98	122,410.02	61.88	1,978.03	382,922.58
Copiah	211,027.03	12,732.27	34.59	368.04	216,971.81	16,044.06	35.57	451.07	188,321.28
Corinth	128,100.00	12,650.00	21.00	602.38	122,000.00	11,550.00	20.00	577.50	122,000.00
Covington County	231,800.00	3,800.00	38.00	100.00	221,116.76	14,500.24	36.25	400.02	246,835.68
DeSoto County	754,421.62	51,200.16	123.57	414.33	810,838.38	63,028.08	132.92	474.17	828,412.97
Drew	85,400.00	12,800.00	14.00	914.29	85,400.00	12,975.00	14.00	926.79	79,300.00
Durant	48,800.00	0.00	8.00	0.00	48,800.00	1,200.00	8.00	150.00	48,107.57
East Jasper	97,600.00	2,400.00	16.00	150.00	97,303.24	2,449.76	15.95	153.58	91,500.00
East Tallahatchie	115,900.00	0.00	19.00	0.00	97,600.00	900.00	16.00	56.25	91,500.00
Enterprise	53,416.22	3,902.78	8.76	445.69	54,900.00	3,700.00	9.00	411.11	42,700.00
Forest	122,000.00	4,000.00	20.00	200.00	122,000.00	4,900.00	20.00	245.00	128,100.00
Forrest County	201,464.86	4,803.14	33.03	145.43	192,825.95	5,244.81	31.61	165.92	170,074.59
Franklin County	140,300.00	0.00	23.00	0.00	128,100.00	0.00	21.00	0.00	122,000.00
George County	211,191.89	22,588.11	34.62	652.43	225,700.00	23,918.00	37.00	646.43	225,700.00
Greene County	134,200.00	65.70	22.00	2.99	122,000.00	6,200.00	20.00	310.00	-NA-
Greenville	597,800.00	0.00	98.00	0.00	684,057.30	0.03	112.14	0.00	677,100.00
Greenwood	293,459.46	32,915.00	47.71	689.92	286,700.00	34,744.00	47.00	739.23	282,710.27
Grenada	256,200.00	21,086.19	42.00	502.05	250,100.00	14,750.00	41.00	359.76	260,387.57
Gulfport	364,983.33	56,864.00	59.83	950.37	367,355.56	50,789.22	59.38	855.26	366,779.44
Hancock County	152,500.00	15,075.00	25.00	603.00	152,236.22	14,615.78	24.96	585.64	156,984.32
Harrison County	644,227.78	42,142.67	105.61	399.04	662,721.43	93,748.12	108.64	862.90	655,582.42
Hattiesburg	372,100.00	11,356.00	61.00	186.16	349,851.05	11,854.11	57.35	206.69	335,500.00
Hazlehurst	122,000.00	5,892.00	20.00	294.60	115,504.32	5,455.68	18.94	288.12	109,800.00
Hinds County	388,916.22	17,972.78	63.76	281.90	384,300.00	65,840.00	63.00	1,045.08	370,880.00
Hollandale	97,600.00	6,272.00	16.00	392.00	91,500.00	3,195.38	15.00	213.03	85,400.00

* Using Median

SOURCE: PEER analysis of State Department of Education records.

1991-92			1992-93				1993-94			
District Salary *	FTE	District Salary per FTE	State Salary	District Salary *	FTE	District Salary per FTE	State Salary	District Salary *	FTE	District Salary per FTE
2,001.44	23.72	84.40	143,087.63	10,460.37	23.46	445.94	140,700.00	2,000.00	21.00	95.24
24,445.00	35.00	698.43	244,778.72	37,292.28	40.13	929.34	247,900.00	21,585.00	37.00	583.38
23,478.00	21.00	1,118.00	125,132.43	23,147.57	20.51	1,128.41	140,700.00	23,499.00	21.00	1,119.00
5,300.00	16.00	331.25	109,800.00	6,700.00	18.00	372.22	113,359.68	9,301.32	16.92	549.74
3,665.00	6.00	610.83	-NA-	-NA-	-NA-	-NA-	-NA-	-NA-	-NA-	-NA-
9,424.00	13.98	673.93	85,400.00	8,694.00	14.00	621.00	87,100.00	8,073.00	13.00	621.00
7,250.00	10.00	725.00	67,100.00	8,406.00	11.00	764.18	73,700.00	6,316.35	11.00	574.21
40,559.67	30.69	1,321.58	139,636.96	31,702.04	22.89	1,384.89	140,700.00	50,157.50	21.00	2,388.45
0.00	4.00	0.00	28,966.84	49.16	4.75	10.35	24,989.19	371.81	3.73	99.69
6,300.00	15.31	411.62	82,168.65	15,441.35	13.47	1,146.33	102,745.41	11,419.59	14.59	782.88
97,354.37	74.70	1,303.25	442,515.22	124,492.78	72.54	1,716.11	486,842.39	132,167.61	72.66	1,818.91
2,650.00	10.00	265.00	67,100.00	3,150.00	11.00	286.36	80,400.00	2,600.00	12.00	216.67
3,700.00	36.72	100.75	201,300.00	3,870.00	33.00	117.27	227,800.00	4,415.00	34.00	129.85
13,446.00	27.00	498.00	179,208.11	22,472.89	29.07	773.04	187,600.00	12,208.00	28.00	436.00
19,506.92	36.34	536.84	234,569.73	22,017.27	38.45	572.56	243,916.22	23,807.78	36.41	653.96
0.00	14.00	0.00	78,673.51	5,159.49	12.90	400.04	86,556.76	5,168.24	12.92	400.05
2,716.12	4.71	577.81	36,665.24	3,654.64	4.96	736.73	34,682.35	4,049.65	5.01	808.83
0.00	21.00	0.00	122,000.00	0.00	20.00	0.00	127,300.00	0.00	19.00	0.00
213,520.49	27.30	7,822.04	178,713.51	229,116.49	29.30	7,820.40	189,591.89	216,774.11	28.30	7,660.59
0.00	54.86	0.00	322,277.84	0.00	52.83	0.00	328,300.00	17,150.00	49.00	350.00
1.03	6.81	0.15	42,700.00	1,281.00	7.00	183.00	40,200.00	1,098.00	6.00	183.00
11,024.60	45.51	242.24	277,320.43	12,362.57	45.46	271.93	269,512.90	16,076.10	40.23	399.65
37,594.96	45.95	818.24	276,828.49	37,053.51	45.38	816.49	318,538.17	25,674.51	47.54	540.03
7,768.24	26.88	289.04	164,700.00	8,097.00	27.00	299.89	175,793.51	7,871.49	26.24	300.01
2,100.00	9.00	233.33	54,900.00	2,100.00	9.00	233.33	68,005.00	1,158.67	10.15	114.15
14,850.00	21.00	707.14	128,100.00	16,650.00	21.00	792.86	120,600.00	12,900.00	18.00	716.67
133,429.42	62.52	2,134.29	393,089.25	139,100.75	64.44	2,158.58	422,604.30	132,551.70	63.08	2,101.48
14,514.77	30.87	470.15	205,875.00	21,291.26	33.75	630.85	227,978.19	21,203.81	34.03	623.15
21,985.00	20.00	1,099.25	121,644.97	22,656.03	19.04	1,189.66	140,022.87	23,884.13	18.95	1,260.49
18,254.32	40.46	451.12	246,143.24	17,941.76	40.35	444.64	279,697.84	21,654.16	41.75	518.71
68,228.51	135.81	502.40	860,627.57	70,126.43	141.09	497.05	984,827.57	77,977.43	146.99	530.50
13,400.00	13.00	1,030.77	64,231.35	11,251.65	10.53	1,068.56	80,653.51	8,514.49	12.04	707.31
1,182.43	7.89	149.93	48,800.00	1,200.00	8.00	150.00	46,900.00	1,050.00	7.00	150.00
2,250.00	15.00	150.00	79,003.24	1,943.76	12.95	150.08	80,400.00	1,800.00	12.00	150.00
0.00	15.00	0.00	90,477.84	7,494.16	14.83	505.26	100,500.00	0.00	15.00	0.00
2,799.00	7.00	399.86	44,612.43	3,262.57	7.31	446.10	46,537.84	4,277.16	6.95	615.78
4,900.00	21.00	233.33	115,900.00	4,600.00	19.00	242.11	127,300.00	4,800.00	19.00	252.63
5,979.97	27.88	214.48	184,780.54	8,494.03	30.29	280.41	195,052.41	8,278.80	29.11	284.37
0.00	20.00	0.00	109,800.00	0.00	18.00	0.00	133,601.62	14.49	19.94	0.73
24,365.00	37.00	658.51	222,600.54	22,455.46	36.22	619.99	230,825.81	24,170.19	34.45	701.57
-NA-	-NA-	-NA-	140,300.00	7,015.00	23.00	305.00	127,300.00	5,795.00	19.00	305.00
0.00	111.00	0.00	575,114.59	0.00	94.28	0.00	596,300.00	5,050.00	89.00	56.74
42,308.68	46.35	912.89	280,435.14	39,703.86	44.84	885.40	291,359.46	32,015.00	43.26	740.02
18,027.54	40.90	440.74	237,900.00	15,531.00	39.00	398.23	274,663.78	12,486.46	40.99	304.59
53,059.56	60.13	882.45	367,965.56	69,454.44	59.76	1,162.31	434,346.11	65,711.44	64.83	1,013.63
23,700.00	25.74	920.92	168,920.54	23,614.16	27.69	852.75	211,140.54	30,207.46	30.70	984.06
95,468.52	107.10	891.37	677,401.65	133,986.35	111.05	1,206.55	745,540.66	175,153.01	111.27	1,574.06
10,520.00	55.00	191.27	329,400.00	26,147.00	54.00	484.20	381,900.00	29,153.00	57.00	511.46
8,856.00	18.00	492.00	109,800.00	8,749.00	18.00	486.06	120,600.00	8,856.00	18.00	492.00
73,723.00	60.80	1,212.55	352,678.92	71,475.08	57.82	1,236.25	352,782.16	65,137.84	52.65	1,237.09
10,136.00	14.00	724.00	88,400.54	10,527.46	14.49	726.44	93,981.08	14,506.92	14.03	1,034.21

BEST COPY AVAILABLE

Appendix K (continued)

	1989-90				1990-91				
District (Alphabetical Order)	State Salary	District Salary *	FTE	District Salary per FTE	State Salary	District Salary *	FTE	District Salary per FTE	State Salary
Holly Bluff	12,200.00	0.00	2.00	0.00	-NA-	-NA-	-NA-	-NA-	-NA-
Holly Springs	122,000.00	12,000.00	20.00	600.00	97,600.00	9,600.00	16.00	600.00	113,591.89
Holmes County	288,513.51	43,204.49	47.30	913.47	271,994.05	40,840.95	44.59	915.94	276,874.05
Houston	128,100.00	16,476.00	21.00	784.57	122,000.00	16,249.00	20.00	812.45	127,932.42
Humphreys County	196,024.32	2,700.00	32.14	84.02	183,000.00	2,832.00	30.00	94.40	167,469.73
Indianola	231,964.86	11,570.00	38.03	304.26	225,700.00	11,914.00	37.00	322.00	200,244.86
Itawamba County	195,200.00	1,225.00	32.00	38.28	188,539.46	1,785.54	30.91	57.77	194,804.32
Iuka	68,913.51	220.49	11.30	19.52	67,100.00	0.00	11.00	0.00	
Jackson	2,378,687.18	808,136.13	389.95	2,072.42	2,346,158.59	726,498.44	384.62	1,888.89	1,931,129.95
Jackson County	396,500.00	49,540.00	65.00	762.15	385,757.22	61,279.00	63.24	969.01	395,280.00
Jefferson County	152,500.00	0.00	25.00	0.00	152,500.00	0.00	25.00	0.00	128,100.00
Jefferson Davis County	199,981.08	11,192.92	32.78	341.42	193,749.19	10,800.00	31.76	340.03	183,659.46
Jones County	566,640.54	19,801.65	92.89	213.17	559,716.22	18,349.78	91.76	199.98	530,996.76
Kemper County	115,900.00	9,075.00	19.00	477.63	115,900.00	9,900.00	19.00	521.05	109,008.65
Kosciusko	122,000.00	6,515.00	20.00	325.75	128,132.80	5,586.03	21.01	265.93	170,340.86
Lafayette County	120,516.22	9,273.78	19.76	469.40	115,900.00	8,721.00	19.00	459.00	115,900.00
Lamar County	339,621.62	37,221.38	55.68	668.54	322,541.62	37,926.38	52.88	717.27	320,134.59
Lauderdale County	414,800.00	26,150.00	68.00	384.56	425,120.54	57,786.57	69.24	834.56	397,522.16
Laurel	207,230.56	2.78	33.97	0.08	200,906.45	393.55	32.94	11.95	210,777.96
Lawrence County	176,900.00	19,408.00	29.00	669.24	170,800.00	19,396.00	28.00	692.71	162,966.67
Leake County	193,221.62	6,239.70	31.68	196.99	206,608.65	16,331.68	32.25	506.35	192,067.57
Lee County	347,700.00	8,400.00	57.00	147.37	347,700.00	20,564.00	57.00	360.77	352,904.89
Leflore County	280,600.00	10,400.00	46.00	226.09	231,800.00	9,200.00	38.00	242.11	216,550.00
Leland	115,900.00	0.00	19.00	0.00	116,394.59	4,931.54	19.08	258.45	130,737.84
Lincoln County	158,600.00	0.00	26.00	0.00	152,500.00	0.00	25.00	0.00	158,600.00
Long Beach	188,605.41	22,557.59	30.92	729.57	200,244.86	33,544.14	32.83	1,021.85	230,843.78
Louisville	236,745.95	8,982.05	38.81	231.43	241,560.00	9,662.00	39.60	243.99	221,281.62
Lowndes County	338,137.84	50,368.08	53.81	936.06	319,277.30	56,420.70	52.34	1,077.95	332,037.84
Lumberton	53,745.95	2,100.00	8.81	238.34	54,900.00	2,700.00	9.00	300.00	59,549.19
Madison County	339,291.89	40,945.11	55.62	736.14	328,481.72	41,373.28	52.97	781.08	385,054.30
Marion County	201,300.00	2,425.50	33.00	73.50	195,200.00	3,099.00	32.00	96.84	182,208.65
Marshall County	218,610.81	10,651.19	35.84	297.21	212,082.16	11,292.84	34.77	324.81	221,215.68
McComb	221,908.11	4,475.89	36.38	123.04	198,761.08	3,256.92	32.58	99.96	197,936.76
Meridian	488,000.00	88,078.00	80.00	1,100.98	491,466.67	134,037.33	80.03	1,674.90	479,833.33
Monroe County	170,635.14	9,762.86	27.97	349.01	170,997.84	8,930.16	28.03	318.57	170,800.00
Montgomery County	65,913.89	4,687.11	10.81	433.77	61,000.00	5,000.00	10.00	500.00	54,570.27
Moss Point	325,772.97	10,951.03	53.41	205.05	326,498.38	20,530.62	53.52	383.58	329,400.00
Mound Bayou	85,400.00	7,000.00	14.00	500.00	63,637.84	5,840.16	10.43	559.81	61,000.00
Natchez Adams	$354,624	$28,960	58.14	$498	$383,970	$66,110	60.23	$1,098	$345,919
Neshoba County	170,800.00	17,532.00	28.00	626.14	158,600.00	15,163.00	26.00	583.19	164,700.00
Nettleton	102,710.81	4,029.19	16.84	239.29	85,400.00	5,725.00	14.00	408.93	85,534.07
New Albany	122,000.00	10,500.00	20.00	525.00	115,575.53	10,934.47	18.95	577.11	121,142.70
Newton	103,700.00	0.00	16.73	0.00	97,600.00	0.00	15.45	0.00	84,066.67
Newton County	109,800.00	0.00	18.00	0.00	103,700.00	0.00	17.00	0.00	97,600.00
North Bolivar	73,200.00	4,080.00	12.00	340.00	84,180.00	3,940.00	13.80	285.51	71,419.46
North Panola	153,983.78	20,404.22	25.24	808.30	150,224.86	25,515.14	24.63	1,036.06	155,071.89
North Pike	84,245.95	2,807.05	13.81	203.25	85,400.00	3,675.00	14.00	262.50	85,400.00
North Tippah	91,500.00	10,500.00	15.00	700.00	90,178.33	9,650.00	14.00	689.17	79,300.00
Noxubee County	164,700.00	5,200.00	27.00	192.59	170,800.00	6,800.00	28.00	242.86	164,700.00
Ocean Springs	219,600.00	46,819.00	36.00	1,300.53	223,754.59	48,969.41	36.68	1,335.00	213,170.27
Okolona	79,300.00	0.00	13.00	0.00	91,500.00	3,600.00	15.00	240.00	73,200.00
Oktibbeha County	109,800.00	4,842.00	18.00	269.00	124,242.16	8,177.84	20.37	401.51	115,504.32
Oxford	176,900.00	10,650.00	29.00	367.24	176,900.00	11,800.00	28.08	420.16	158,600.00
Pascagoula	463,600.00	119,966.00	76.00	1,578.50	451,432.45	129,638.66	74.01	1,751.75	439,751.60
Pass Christian	85,400.00	15,574.00	14.00	1,112.43	85,400.00	15,816.00	14.00	1,129.71	79,300.00
Pearl	255,045.95	30,159.05	41.81	721.32	256,496.76	33,075.24	42.05	786.59	258,936.76
Pearl River County	109,800.00	6,300.00	18.00	350.00	115,900.00	6,899.00	19.00	363.11	115,900.00
Perry County	109,800.00	0.00	18.00	0.00	97,600.00	400.00	16.00	25.00	90,247.03
Petal	164,700.00	4,300.00	27.00	159.26	178,400.53	3,800.47	29.25	129.95	183,000.00
Philadelphia	79,300.00	0.00	13.00	0.00	79,300.00	0.00	13.00	0.00	79,300.00

1991-92			1992-93				1993-94			
District Salary *	FTE	District Salary per FTE	State Salary	District Salary *	FTE	District Salary per FTE	State Salary	District Salary *	FTE	District Salary per FTE
-NA-	-NA-	-NA-	-NA-	-NA-	-NA-	-NA-	-NA-	-NA-	-NA-	-NA-
10,850.11	18.62	582.66	122,000.00	11,891.00	20.00	594.55	120,600.00	10,800.00	18.00	600.00
43,358.95	45.39	955.27	274,500.00	44,035.50	45.00	978.57	288,063.78	37,416.22	42.99	870.25
17,557.58	20.97	837.17	120,893.96	15,317.04	19.82	772.86	133,926.37	16,979.63	19.99	849.45
5,423.27	27.45	197.54	152,335.14	2,495.86	24.97	99.94	172,352.97	7,718.03	25.72	300.03
10,570.14	32.83	321.99	192,397.30	13,106.70	31.54	415.55	195,929.73	10,815.27	28.58	378.39
1,600.68	31.94	50.12	191,408.11	1,440.14	29.48	48.86	214,400.00	1,265.00	31.00	40.81
-NA-	-NA-	-NA-	-NA-	-NA-	-NA-	-NA-	-NA-	-NA-	-NA-	-NA-
654,557.05	316.58	2,067.60	2,184,450.25	853,113.75	358.11	2,382.29	2,271,300.00	1,029,709.00	339.00	3,037.49
58,071.33	64.80	896.16	385,791.11	51,329.22	63.24	811.60	437,621.67	94,255.67	65.32	1,443.06
3,990.00	21.00	190.00	106,997.30	9,040.70	17.54	515.42	113,900.00	9.180.00	17.00	540.00
17,884.54	30.11	594.01	176,900.00	19,090.00	29.00	658.28	185,535.68	17,564.32	27.69	634.28
17,405.24	87.05	199.95	517,807.57	16,760.43	84.89	197.45	568,413.51	16,855.49	84.84	198.68
9,745.68	17.87	545.36	108,744.86	9,806.14	16.31	601.39	99,848.11	8,576.89	14.90	575.53
7,491.14	20.92	358.00	164,700.00	16,380.00	19.95	820.87	180,539.78	9,862.22	20.45	482.35
8,721.00	19.00	459.00	128,100.00	9,635.00	21.00	458.81	140,700.00	9,639.00	21.00	459.00
37,931.41	52.48	722.76	331,833.33	36,849.67	54.40	677.40	371,071.35	40,362.65	55.38	728.78
49,656.38	64.31	772.18	402,962.70	56,169.46	66.06	850.29	446,908.11	65,648.89	66.70	984.20
5,498.04	34.55	159.12	207,400.00	6,692.00	34.00	196.82	227,800.00	6,698.00	34.00	197.00
23,049.33	26.72	862.76	158,600.00	21,136.00	26.00	812.92	163,967.93	12,125.07	23.11	524.69
15,743.43	31.49	500.01	188,011.89	15,411.11	30.82	500.01	206,975.68	16,777.32	30.89	543.10
22,450.11	57.85	388.05	366,000.00	29,314.00	60.00	488.57	400,660.00	32,244.00	59.80	539.20
8,317.00	35.50	234.28	202,447.85	7,768.15	33.19	234.06	212,382.80	5,600.00	31.70	176.66
890.27	19.86	44.82	109,800.00	0.00	18.00	0.00	107,200.00	0.00	16.00	0.00
0.00	26.00	0.00	158,600.00	0.00	26.00	0.00	174,200.00	0.00	26.00	0.00
34,140.22	37.84	902.15	219,600.00	35,018.00	36.00	972.72	239,570.27	42,201.73	35.76	1,180.24
8,849.38	36.28	243.95	220,655.14	8,825.86	36.17	243.99	240,511.89	8,760.11	35.90	244.03
60,049.76	54.43	1,103.20	334,411.89	66,208.11	54.82	1,207.70	366,435.68	84,262.32	54.69	1,540.67
4,879.81	9.76	499.87	61,000.00	5,000.00	10.00	500.00	60,300.00	4,500.00	9.00	500.00
48,002.70	63.12	760.45	440,380.65	55,403.35	72.19	767.43	500,482.80	72,680.20	74.70	972.98
5,016.35	29.87	167.94	189,100.00	5,205.00	31.00	167.90	194,300.00	5,303.00	29.00	182.86
11,681.32	36.26	322.11	201,069.19	10,712.81	32.96	325.00	208,895.14	9,448.86	31.18	303.06
3,124.35	32.45	96.29	198,860.00	13,046.00	32.60	400.18	220,194.59	13,031.41	32.86	396.51
128,674.67	78.66	1,635.81	471,600.00	134,943.00	77.31	1,745.45	488,843.72	141,993.28	72.96	1,946.13
10,100.00	28.00	360.71	170,734.05	9,001.95	27.99	321.62	167,500.00	9,700.00	25.00	388.00
4,473.73	8.95	500.08	60,274.59	4,941.41	9.88	500.09	59,249.73	4,422.27	8.84	500.07
19,810.00	54.00	366.85	289,667.57	17,262.46	47.49	363.52	344,343.78	17,875.22	51.39	347.80
5,000.00	10.00	500.00	61,000.00	5,000.00	10.00	500.00	60,300.00	4,500.00	9.00	500.00
$60,863	**56.71**	**$1,073**	**$322,245**	**$68,423**	**52.83**	**$1,295**	**$356,657**	**$79,743**	**53.23**	**$1,498**
17,136.00	27.00	634.67	173,932.43	19,533.57	28.51	685.06	207,700.00	25,053.00	31.00	808.16
3,896.91	14.02	277.91	91,500.00	5,050.00	15.00	336.67	93,800.00	4,700.00	14.00	335.71
13,104.30	19.86	659.85	122,000.00	12,100.00	20.00	605.00	120,600.00	11,200.00	18.00	622.22
5,439.83	13.01	418.18	73,200.00	3,948.00	12.00	329.00	80,400.00	5,755.00	12.00	479.58
0.00	16.00	0.00	91,500.00	0.00	15.00	0.00	97,150.00	0.00	14.50	0.00
5,540.00	11.71	473.18	76,728.11	5,852.11	12.58	465.25	73,700.00	12,300.00	11.00	1,118.18
23,792.11	25.42	935.90	162,886.49	46,365.51	26.70	1,736.36	179,885.95	47,288.05	26.85	1,761.28
4,200.00	14.00	300.00	85,070.27	4,079.73	13.95	292.54	93,800.00	4,200.00	14.00	300.00
13,250.00	13.00	1,019.23	67,574.44	11,304.56	11.08	1,020.47	80,400.00	10,800.00	12.00	900.00
14,380.00	27.00	532.59	164,700.00	25,650.00	27.00	950.00	194,300.00	47,350.00	29.00	1,632.76
46,353.73	34.95	1,326.44	225,172.43	49,092.57	36.91	1,329.93	261,118.92	54,716.08	38.02	1,439.20
4,800.00	12.00	400.00	67,100.00	4,400.00	11.00	400.00	73,700.00	4,134.00	11.00	375.82
7,664.68	18.94	404.79	107,360.00	9,190.00	17.60	522.16	113,900.00	5,924.50	17.00	348.50
12,400.00	25.35	489.13	158,600.00	10,700.00	26.00	411.54	174,200.00	10,600.00	26.00	407.69
127,017.40	72.09	1,761.92	450,686.17	125,447.83	73.88	1,697.93	497,902.66	132,548.34	73.01	1,815.44
14,704.00	13.00	1,131.08	91,500.00	22,191.00	15.00	1,479.40	111,065.38	24,367.62	16.58	1,469.97
37,100.24	42.45	874.00	229,327.03	34,139.97	37.59	908.11	260,358.38	35,169.62	38.86	905.05
7,200.00	19.00	378.95	119,658.92	8,000.08	18.89	423.57	127,300.00	8,800.00	19.00	463.16
9,022.97	14.79	609.88	92,027.57	9,928.43	15.09	658.10	100,500.00	9,150.00	15.00	610.00
14,790.00	30.00	493.00	189,100.00	13,944.00	31.00	449.81	214,400.00	36,269.00	32.00	1,133.41
0.00	13.00	0.00	79,300.00	0.00	[illegible]	0.00	80,400.00	1.08	12.00	0.09

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Appendix K (continued)

	1989-90				1990-91				
District (Alphabetical Order)	State Salary	District Salary *	FTE	District Salary per FTE	State Salary	District Salary *	FTE	District Salary per FTE	State Salary
Picayune	238,064.86	510.97	39.03	13.09	238,757.30	297.24	39.14	7.59	221,941.08
Pontotoc	109,800.00	1,440.00	18.00	80.00	158,237.30	14,802.70	16.93	874.37	146,202.16
Pontotoc County	147,059.46	2,400.00	24.11	99.55	146,400.00	21,600.00	24.00	900.00	151,533.33
Poplarville	115,900.00	6,875.00	19.00	361.84	109,800.00	8,000.00	18.00	444.44	109,800.00
Prentiss County	152,500.00	6,875.00	25.00	275.00	158,600.00	7,150.00	26.00	275.00	158,600.00
Quitman	183,329.73	32.51	30.05	1.08	149,730.27	1.38	24.55	0.06	155,368.65
Quitman County	146,400.00	0.00	24.00	0.00	137,167.57	0.00	22.49	0.00	115,900.00
Rankin County	856,637.84	3,329.32	140.43	23.71	787,687.10	25,017.90	128.57	194.59	845,177.96
Richton	63,472.97	7,427.03	10.41	713.77	61,000.00	4,000.00	10.00	400.00	54,900.00
Scott County	243,340.54	4,004.46	39.39	101.66	231,800.00	7,755.00	38.00	204.08	231,866.30
Senatobia	98,918.92	1,370.41	16.22	84.51	102,315.14	1,764.19	15.91	110.87	85,004.32
Shaw	61,000.00	3,050.00	10.00	305.00	61,000.00	6,100.00	10.00	610.00	59,065.05
Simpson County	274,829.73	6,300.00	45.05	139.83	263,058.38	11,205.00	43.12	259.83	274,500.00
Smith County	201,300.00	7,544.00	33.00	228.61	189,100.00	13,104.00	31.00	422.71	176,240.54
South Delta	91,500.00	571.00	15.00	38.07	97,600.00	980.00	16.00	61.25	85,400.00
South Panola	291,316.22	13,748.78	47.76	287.89	286,667.38	14,098.62	46.99	300.00	285,525.67
South Pike	176,900.00	0.00	29.00	0.00	183,000.00	0.00	30.00	0.00	152,500.00
South Tippah	171,624.32	25,037.68	27.85	898.91	157,940.54	23,301.46	25.89	899.95	158,600.00
Starkville	317,200.00	33,600.00	52.00	646.15	344,831.35	42,529.19	56.53	752.33	342,490.27
Stone County	140,300.00	7,100.00	23.00	308.70	61,000.00	3,550.00	10.00	355.00	132,782.16
Sunflower County	200,805.41	0.00	32.92	0.00	204,992.97	0.03	33.61	0.00	170,173.51
Tate County	237,900.00	5,741.00	39.00	147.21	219,193.33	10,898.67	35.93	303.30	174,527.78
Tishomingo County	115,900.00	4,750.00	19.00	250.00	121,505.41	5,228.59	19.92	262.49	177,031.89
Tunica	115,900.00	5,700.00	19.00	300.00	122,000.00	0.00	20.00	0.00	128,100.00
Tupelo	408,205.41	85,040.59	66.92	1,270.80	416,148.42	85,524.58	68.22	1,253.64	537,183.25
Union	54,900.00	0.00	9.00	0.00	54,108.65	0.00	8.87	0.00	42,139.46
Union County	158,600.00	19,760.00	26.00	760.00	158,600.00	19,760.00	26.00	760.00	134,200.00
Vicksburg Warren	628,300.00	51,182.00	102.08	501.37	620,056.76	52,830.24	101.65	519.73	599,877.30
Walthall County	207,400.00	4,950.00	34.00	145.59	201,300.00	13,104.00	33.00	397.09	188,015.56
Water Valley	97,600.00	4,000.00	16.00	250.00	97,600.00	4,900.00	16.00	306.25	85,400.00
Wayne County	272,356.76	15,783.24	44.65	353.50	267,012.17	14,352.83	43.77	327.90	279,556.15
Webster County	122,000.00	0.00	20.00	0.00	133,507.57	0.00	21.89	0.00	128,100.00
West Bolivar	113,591.89	2,234.11	17.96	124.39	96,215.14	1,891.86	15.77	119.94	91,500.00
West Jasper	116,559.46	7,903.54	19.11	413.62	115,707.37	1,725.63	18.97	90.97	117,185.95
West Point	237,900.00	14,042.00	39.00	360.05	237,240.54	19,639.46	38.89	504.98	226,359.46
West Tallahatchie	110,624.32	235.51	18.14	12.99	99,281.62	5,394.38	16.28	331.44	99,314.59
Western Line	133,870.27	164.73	21.21	7.76	151,571.74	0.00	24.85	0.00	128,100.00
Wilkinson County	128,594.59	2,661.86	21.08	126.27	138,190.96	7,307.04	22.65	322.55	134,751.60
Winona	103,700.00	9,843.00	17.00	579.00	97,600.00	12,464.00	16.00	779.00	87,345.41
Yazoo City	234,437.84	6,197.16	38.43	161.25	231,800.00	5,300.00	38.00	139.47	224,512.97
Yazoo County	103,700.00	3,400.00	17.00	200.00	103,700.00	3,400.00	17.00	200.00	80,783.78
State Total	**$32,109,459.79**	**$3,010,459.26**	**5,258.39**	**$572.51**	**$31,802,065.83**	**$3,441,829.73**	**5,192.22**	**$662.88**	**$30,711,384.22**

1991-92			1992-93				1993-94			
District Salary *	FTE	District Salary per FTE	State Salary	District Salary *	FTE	District Salary per FTE	State Salary	District Salary *	FTE	District Salary per FTE
7,275.92	36.38	199.98	237,603.24	15,598.76	38.95	400.47	259,163.24	16,763.76	37.96	441.67
1,917.84	17.95	106.87	152,500.00	2,000.00	18.98	105.39	160,800.00	3,840.00	17.97	213.64
22,366.67	24.84	900.37	152,333.33	22,438.67	24.97	898.53	180,533.88	24,252.12	26.95	900.05
10,250.00	18.00	569.44	115,932.97	16,470.49	19.01	866.62	120,600.00	16,800.00	18.00	933.33
7,081.00	26.00	272.35	167,107.03	7,498.97	26.58	282.15	167,500.00	6,875.00	25.00	275.00
7,669.35	25.47	301.11	145,773.51	8,536.49	23.90	357.22	158,916.76	9,254.24	23.72	390.16
0.00	19.00	0.00	107,129.19	2.73	17.56	0.16	119,839.46	0.00	17.89	0.00
28,488.15	138.55	205.61	747,086.02	20,983.98	122.47	171.34	814,569.52	57,974.48	121.58	476.85
4,500.00	9.00	500.00	60,670.27	4,979.73	9.95	500.68	66,855.14	5,289.86	9.98	530.13
7,688.70	38.01	202.28	240,187.50	15,782.50	39.38	400.83	263,617.84	15,767.16	39.35	400.73
1,416.32	13.20	107.28	91,500.00	1,350.00	15.00	90.00	114,262.16	3,346.84	16.06	208.40
8,857.95	9.68	914.81	60,442.47	9,067.53	9.91	915.12	67,000.00	9,186.00	10.00	918.60
5,725.00	45.00	127.22	283,303.78	5,175.00	46.44	111.43	304,542.16	4,437.05	45.45	97.62
16,125.31	28.89	558.13	169,478.33	15,031.78	27.78	541.04	191,582.78	15,672.22	28.59	548.09
5,525.00	14.00	394.64	115,900.00	7,939.00	19.00	417.84	119,911.89	13,353.11	17.90	746.10
19,174.33	45.89	417.87	267,943.32	27,157.68	43.93	618.27	294,477.54	27,871.46	43.95	634.14
0.00	25.00	0.00	152,500.00	0.00	25.00	0.00	174,996.76	144.27	26.12	5.52
23,400.00	26.00	900.00	157,973.51	22,276.49	25.90	860.19	174,127.57	23,390.43	25.02	934.78
55,981.92	54.52	1,026.87	334,576.76	57,204.24	54.85	1,042.95	361,800.00	64,800.00	54.00	1,200.00
6,514.81	21.77	299.29	146,400.00	6,250.00	24.00	260.42	160,800.00	5,800.00	24.00	241.67
5,174.49	27.90	185.48	181,615.14	5,894.57	29.77	197.98	209,003.78	9,148.22	31.19	293.26
5,230.89	28.61	182.83	176,086.67	4,842.56	28.87	167.76	207,811.67	20,299.78	31.02	654.48
7,119.11	29.02	245.30	193,386.49	12,200.11	31.70	384.83	218,890.81	13,220.19	32.67	404.66
6,300.00	21.00	300.00	122,000.00	6,000.00	20.00	300.00	127,300.00	5,700.00	19.00	300.00
124,697.75	87.74	1,421.24	536,832.28	146,529.87	87.16	1,681.18	647,666.67	144,137.33	96.67	1,491.08
13.41	6.91	1.94	54,009.73	0.00	8.07	0.00	53,600.00	0.00	8.00	0.00
16,720.00	22.00	760.00	146,400.00	30,206.00	24.00	1,258.58	173,837.84	29,174.16	25.95	1,124.42
52,533.70	98.34	534.20	564,464.32	58,661.68	92.54	633.94	596,227.57	76,566.43	88.18	868.26
23,116.44	30.82	749.99	176,018.89	24,419.11	28.86	846.25	193,034.44	24,779.56	28.81	860.07
5,274.00	14.00	376.71	85,400.00	6,300.00	14.00	450.00	86,169.44	4,600.00	12.86	357.67
17,906.82	45.83	390.73	268,400.00	19,623.00	44.00	445.98	305,918.38	24,856.62	45.66	544.39
0.00	21.00	0.00	122,000.00	0.00	20.00	0.00	134,000.00	0.00	20.00	0.00
1,800.00	15.00	120.00	87,246.49	1,716.51	14.30	120.01	100,500.00	1,680.00	15.00	112.00
1,773.11	18.36	96.59	108,085.41	1,038.59	16.91	61.41	120,098.40	2,125.00	17.93	118.55
24,367.54	37.11	656.66	234,932.43	19,253.57	37.90	508.07	241,200.00	18,000.00	36.00	500.00
5.46	16.28	0.34	97,731.89	3,683.49	16.02	229.91	93,800.00	4,816.00	14.00	344.00
0.00	21.00	0.00	151,788.33	9,894.67	24.03	411.83	160,800.00	0.00	24.00	0.00
6,457.40	21.19	304.78	128,100.00	12,600.00	21.00	600.00	120,600.00	10,800.00	18.00	600.00
11,154.59	14.32	779.01	91,500.00	11,685.00	15.00	779.00	100,500.00	11,685.00	15.00	779.00
9,563.03	36.81	259.83	244,000.00	8,834.00	40.00	220.85	262,495.14	20,953.86	39.18	534.83
2,648.22	13.24	199.97	97,204.32	3,013.68	15.94	189.12	113,900.00	8,500.00	17.00	500.00
$3,574,780.47	**5,009.77**	**$713.56**	**$30,835,293.01**	**$4,130,222.39**	**5,028.80**	**$821.31**	**$33,506,063.72**	**$4,594,791.43**	**4,975.72**	**$923.44**

Appendix L

Analysis of Test Data

Design Considerations

PEER designed this study to ensure that the two groups selected to represent program participants and program non-participants were as similar as possible in all areas other than their participation in the Reading Improvement Program. If an evaluation design provides full comparability on all factors other than the factor in question (e.g., participation in the Reading Improvement Program), the evaluator can validly conclude that any differences in performance are fully attributable to the program in question.

Such comparability is rarely possible. In the absence of full comparability (e.g., students with the same year of entry and comparable socioeconomic backgrounds, taught by teachers with the same levels of experience and training), PEER compared the performance of the group of students entering first grade in 1982-83, just prior to implementation of the Reading Improvement Program, with the performance of students entering first grade in 1983-84. Focusing on these two groups of students, who proceeded through each grade level within the same general period, minimizes interference by other factors. This comparison can be supplemented with data from the classes entering first grade in 1981-82, the next-to-last class without assistant reading instructors, and the classes entering first grade in 1984-85 and 1985-86, soon after program implementation. The school careers of these five classes occurred in close enough proximity during the 1980s and early 1990s to ensure some measure of comparability.

Despite PEER's efforts to eliminate the influence of other factors as possible explanations of differences among these groups, the validity of comparisons between groups entering school before and after program implementation potentially is threatened by any demographic difference among the five classes, such as differences in family income and parents' educational background. In addition, the influence of other reform-related programs, such as changes in teacher certification requirements and teacher education, could affect some or all of the groups to varying degrees.

Nevertheless, by restricting the test score analysis to the classes entering first grade just before and just after program implementation, PEER eliminated the factor that would be most likely to confuse the interpretation of test score data--the statewide kindergarten program. A portion of the class entering first grade in 1986-87 attended state-funded kindergarten during its pilot year; a larger portion of the class entering first grade in 1987-88 participated in the statewide kindergarten program. Therefore, any effects of the assistant reading instructor program would be indistinguishable from the effects of the statewide kindergarten program for groups entering first grade in 1986-87 and thereafter. For this reason, PEER included in its "with assistants" group only the classes entering first grade in school years 1983-84, 1984-85, and 1985-86.

PEER did not compare one-year gains for primary grade students with and without assistant reading instructors (the design of the 1983 pilot program evaluation) because comparison districts no longer are available. No Mississippi students in kindergarten through third grade are completely without the services of assistant reading instructors throughout their primary years. Even if districts or classes had been available for comparison, the necessary test data would not have been available because the State Department of Education does not administer tests on the schedule needed for computing gain scores. Such scores are computed using scores from tests administered at the beginning and end of the school year.

Performance Data

The Stanford Achievement Test is the only nationally normed, standardized test administered consistently after implementation of the Reading Improvement Program. The State Department of Education administered the Stanford Achievement Test statewide to students in the fourth, sixth, and eighth grades from 1988 through 1994. This testing program began too late to include any fourth-graders who did not have assistant reading instructors in their primary years (i.e., groups who entered first grade in 1982-83 and earlier). Therefore, PEER limited its comparison of the performance of groups with and without the program to examining trends among sixth- and eighth-graders.

Virtually all Stanford Achievement Test averages for Mississippi students declined substantially from 1989 to 1990. Material distributed to the school districts by the State Department of Education in 1990 explained that the test publisher had developed a new version of the Stanford Achievement Test for 1990 and had changed the test's norms. That is, the publisher developed a new version of the test and compared Mississippi students' 1990 results with scores of a nationally representative comparison group that was different from the comparison group used in interpreting 1988 and 1989 Stanford Achievement Test results. This change in content and test norms may have caused at least a portion of the 1990 decline.

SOURCE: PEER analysis.

Appendix M
Table 1

Difference Between Eighth Grade Reading Scores* of Students Without and With Assistant Reading Instructors (ARIs) in Their Primary Years on Stanford Achievement Test, Reported in Normal Curve Equivalent Score Points

School District (Alphabetical by District Name)	8th Grade Reading Score without ARIs (1990)	8th Grade Reading Score with ARIs (1991-93 Average)	Average Gain (Loss) in Reading Scores (Difference between scores of 8th graders without and with ARIs)
ABERDEEN	37.1	42.4	5.3
ALCORN	49.3	48.7	(0.6)
AMITE	39.6	38.7	(0.9)
AMORY	48.7	43.9	(4.8)
ANGUILLA LINE	42.8	50.8	8.0
ATTALA	36.1	37.3	1.2
BALDWYN	42.2	43.7	1.5
BAY ST LOUIS	44.0	47.2	3.2
BENTON	36.8	36.8	0.0
BILOXI	49.8	50.2	0.4
BOLIVAR DISTRICT #2	31.3	39.9	8.6
BOLIVAR DISTRICT #5	29.2	33.5	4.3
BOONEVILLE	50.9	49.3	(1.6)
BROOKHAVEN	38.4	41.9	3.5
CALHOUN	46.3	42.4	(3.9)
CANTON	29.2	31.3	2.1
CARROLL	36.3	36.5	0.2
CHICKASAW	39.5	43.5	4.0
CHOCTAW	44.3	43.9	(0.4)
CLAIBORNE	29.9	34.2	4.3
CLARKSDALE	43.6	40.2	(3.4)
CLAY	33.3	33.4	0.1
CLEVELAND	41.8	44.1	2.3
CLINTON	56.0	56.0	0.0
COAHOMA	35.4	40.5	5.1
COFFEEVILLE	34.7	38.2	3.5
COLUMBIA	48.4	46.8	(1.6)
COLUMBUS	43.7	41.8	(1.9)

* Eighth grade is the only level for which norm-referenced statewide testing data from one test series (Stanford Achievement Test) using the same norms (introduced in 1990) is available for groups of students who entered first grade prior to implementation of the Reading Improvement Program.

Appendix M
Table 1 (Continued)

School District (Alphabetical by District Name)	8th Grade Reading Score without ARIs (1990)	8th Grade Reading Score with ARIs (1991-93 Average)	Average Gain (Loss) in Reading Scores (Difference between scores of 8th graders without and with ARIs)
COPIAH	39.3	38.8	(0.5)
CORINTH	49.0	49.5	0.5
COVINGTON	39.1	38.4	(0.7)
DESOTO	49.3	47.2	(2.1)
DREW	42.0	36.8	(5.2)
DURANT	45.2	37.6	(7.6)
EAST JASPER	39.3	38.7	(0.6)
EAST TALLAHATCHIE	38.1	36.5	(1.6)
FOREST	40.0	40.9	0.9
FORREST	49.1	49.0	(0.1)
FRANKLIN	42.9	46.8	3.9
GEORGE	41.8	43.3	1.5
GREENE	42.5	43.9	1.4
GREENVILLE	39.2	39.5	0.3
GREENWOOD	42.7	38.6	(4.1)
GRENADA	46.9	42.8	(4.1)
GULFPORT	45.6	46.8	1.2
HANCOCK	43.5	42.9	(0.6)
HARRISON	42.8	46.6	3.8
HATTIESBURG	44.9	44.8	(0.1)
HAZELHURST	35.6	32.4	(3.2)
HINDS	44.1	41.7	(2.4)
HOLLANDALE	38.7	47.0	8.3
HOLLY BLUFF (Later Consolidated)	22.3		
HOLLY SPRINGS	32.4	31.5	(0.9)
HOLMES	37.9	43.4	5.5
HOUSTON	43.9	45.2	1.3
HUMPHREYS	50.1	39.2	(10.9)
INDIANOLA	37.8	36.0	(1.8)
ITAWAMBA	46.6	46.6	0.0
IUKA	50.6	49.8	(0.8)
JACKSON	48.5	49.4	0.9
JACKSON SEPARATE	41.9	41.0	(0.9)
JEFFERSON	36.2	44.9	8.7
JEFFERSON DAVIS	36.1	35.4	(0.7)
JONES	47.0	45.1	(1.9)
KEMPER	28.7	36.7	8.0
KOSCIUSKO	47.4	48.0	0.6
LAFAYETTE	46.8	45.4	(1.4)
LAMAR	51.0	48.3	(2.7)
LAUDERDALE	46.4	44.6	(1.8)
LAUREL	45.3	42.6	(2.7)

Appendix M
Table 1 (Continued)

School District (Alphabetical by District Name)	8th Grade Reading Score without ARIs (1990)	8th Grade Reading Score with ARIs (1991-93 Average)	Average Gain (Loss) in Reading Scores (Difference between scores of 8th graders without and with ARIs)
LAWRENCE	39.6	42.4	2.8
LEAKE	38.7	37.5	(1.2)
LEE	45.7	44.4	(1.3)
LEFLORE	33.5	34.8	1.3
LELAND	39.5	40.6	1.1
LINCOLN	43.0	41.3	(1.7)
LONG BEACH	56.9	57.8	0.9
LOUISVILLE	42.0	42.0	0.0
LOWNDES	44.7	45.9	1.2
LUMBERTON LINE	43.2	42.3	(0.9)
MADISON	46.1	46.7	0.6
MARION	44.2	38.8	(5.4)
MARSHALL	33.6	35.1	1.5
MCCOMB	46.1	44.1	(2.0)
MERIDIAN	42.6	44.2	1.6
MONROE	45.9	45.1	(0.8)
MONTGOMERY	35.9	37.8	1.9
MOSS POINT	41.3	47.4	6.1
MOUND BAYOU	31.0	37.2	6.2
NATCHEZ ADAMS	39.6	41.0	1.4
NESHOBA	41.9	43.5	1.6
NETTLETON LINE	48.5	40.9	(7.6)
NEW ALBANY	48.0	48.7	0.7
NEWTON COUNTY	45.6	45.7	0.1
NEWTON SEP	45.1	45.7	0.6
NORTH BOLIVAR COUNTY #3	37.6	43.8	6.2
NORTH PANOLA	25.1	35.6	10.5
NORTH PIKE	44.4	46.3	1.9
NORTH TIPPAH	41.2	42.2	1.0
NOXUBEE	32.8	44.4	11.6
OCEAN SPRINGS	55.8	56.3	0.5
OKOLONA	41.1	41.2	0.1
OKTIBBEHA	35.9	32.0	(3.9)
OXFORD	48.6	49.6	1.0
PASCAGOULA	48.1	47.7	(0.4)
PASS CHRISTIAN	41.7	45.1	3.4
PEARL RIVER	41.8	42.5	0.7
PEARL	48.2	46.8	(1.4)
PERRY	33.6	40.9	7.3
PETAL	46.8	50.4	3.6
PHILADELPHIA	45.2	43.4	(1.8)
PICAYUNE	49.4	51.5	2.1

Appendix M
Table 1 (Continued)

School District (Alphabetical by District Name)	8th Grade Reading Score without ARIs (1990)	8th Grade Reading Score with ARIs (1991-93 Average)	Average Gain (Loss) in Reading Scores (Difference between scores of 8th graders without and with ARIs)
PONTOTOC	46.2	47.2	1.0
PONTOTOC SEPARATE	51.0	53.3	2.3
POPLARVILLE	48.6	47.1	(1.5)
PRENTISS	43.4	43.9	0.5
QUITMAN	31.2	35.0	3.8
QUITMAN CONSOLIDATED	46.8	43.2	(3.6)
RANKIN	49.3	50.9	1.6
RICHTON	44.9	44.7	(0.2)
SCOTT	42.6	41.9	(0.7)
SENATOBIA	55.4	49.2	(6.2)
SHARKEY ISSAQUENA	36.7	31.0	(5.7)
SIMPSON	41.5	37.4	(4.1)
SMITH	42.5	43.2	0.7
SOUTH PANOLA	43.2	40.9	(2.3)
SOUTH PIKE	37.5	37.3	(0.2)
SOUTH TIPPAH	46.3	45.0	(1.3)
STARKVILLE	47.8	46.9	(0.9)
STONE	44.9	46.4	1.5
SUNFLOWER	35.6	36.5	0.9
TATE	40.2	38.4	(1.8)
TISHOMINGO	49.4	48.4	(1.0)
TUNICA	24.6	27.3	2.7
TUPELO	52.2	50.2	(2.0)
UNION	48.7	49.1	0.4
UNION SEP	43.9	46.3	2.4
VICKSBURG-WARREN	43.7	44.1	0.4
WALTHALL	39.4	39.8	0.4
WATER VALLEY	42.4	40.6	(1.8)
WAYNE	45.6	45.7	0.1
WEBSTER	48.9	49.5	0.6
WEST BOLIVAR	27.9	31.0	3.1
WEST JASPER	35.6	39.7	4.1
WEST POINT	40.7	39.4	(1.3)
WEST TALLAHATCHIE	27.2	27.7	0.5
WESTERN LINE	40.9	41.8	0.9
WILKINSON COUNTY	32.1	35.4	3.3
WINONA	41.5	43.5	2.0
YAZOO	42.1	39.1	(3.0)
YAZOO CITY	35.8	34.9	(0.9)
STATE AVERAGE	43.4	43.6	0.2

Appendix M
Table 2

Difference Between Eighth Grade Reading Scores* of Students Without and With Assistant Reading Instructors (ARIs) in Their Primary Years on Stanford Achievement Test, Reported in Normal Curve Equivalent Score Points

School District (Sorted by Average Gain)	8th Grade Reading Score without ARIs (1990)	8th Grade Reading Score with ARIs (1991-93 Average)	Average Gain (Loss) in Reading Scores (Difference between scores of 8th graders without and with ARIs)
NOXUBEE	32.8	44.4	11.6
NORTH PANOLA	25.1	35.6	10.5
JEFFERSON	36.2	44.9	8.7
BOLIVAR DISTRICT #2	31.3	39.9	8.6
HOLLANDALE	38.7	47.0	8.3
KEMPER	28.7	36.7	8.0
ANGUILLA LINE	42.8	50.8	8.0
PERRY	33.6	40.9	7.3
MOUND BAYOU	31.0	37.2	6.2
NORTH BOLIVAR COUNTY #3	37.6	43.8	6.2
MOSS POINT	41.3	47.4	6.1
HOLMES	37.9	43.4	5.5
ABERDEEN	37.1	42.4	5.3
COAHOMA	35.4	40.5	5.1
CLAIBORNE	29.9	34.2	4.3
BOLIVAR DISTRICT #5	29.2	33.5	4.3
WEST JASPER	35.6	39.7	4.1
CHICKASAW	39.5	43.5	4.0
FRANKLIN	42.9	46.8	3.9
HARRISON	42.8	46.6	3.8
QUITMAN	31.2	35.0	3.8
PETAL	46.8	50.4	3.6
BROOKHAVEN	38.4	41.9	3.5
COFFEEVILLE	34.7	38.2	3.5
PASS CHRISTIAN	41.7	45.1	3.4
WILKINSON COUNTY	32.1	35.4	3.3
BAY ST LOUIS	44.0	47.2	3.2
WEST BOLIVAR	27.9	31.0	3.1

* Eighth grade is the only level for which norm-referenced statewide testing data from one test series (Stanford Achievement Test) using the same norms (introduced in 1990) is available for groups of students who entered first grade prior to implementation of the Reading Improvement Program.

Appendix M
Table 2 (Continued)

School District (Sorted by Average Gain)	8th Grade Reading Score without ARIs (1990)	8th Grade Reading Score with ARIs (1991-93 Average)	Average Gain (Loss) in Reading Scores (Difference between scores of 8th graders without and with ARIs)
LAWRENCE	39.6	42.4	2.8
TUNICA	24.6	27.3	2.7
UNION SEP	43.9	46.3	2.4
CLEVELAND	41.8	44.1	2.3
PONTOTOC SEPARATE	51.0	53.3	2.3
PICAYUNE	49.4	51.5	2.1
CANTON	29.2	31.3	2.1
WINONA	41.5	43.5	2.0
MONTGOMERY	35.9	37.8	1.9
NORTH PIKE	44.4	46.3	1.9
MERIDIAN	42.6	44.2	1.6
NESHOBA	41.9	43.5	1.6
RANKIN	49.3	50.9	1.6
GEORGE	41.8	43.3	1.5
MARSHALL	33.6	35.1	1.5
STONE	44.9	46.4	1.5
BALDWYN	42.2	43.7	1.5
GREENE	42.5	43.9	1.4
NATCHEZ ADAMS	39.6	41.0	1.4
HOUSTON	43.9	45.2	1.3
LEFLORE	33.5	34.8	1.3
ATTALA	36.1	37.3	1.2
GULFPORT	45.6	46.8	1.2
LOWNDES	44.7	45.9	1.2
LELAND	39.5	40.6	1.1
NORTH TIPPAH	41.2	42.2	1.0
OXFORD	48.6	49.6	1.0
PONTOTOC	46.2	47.2	1.0
JACKSON	48.5	49.4	0.9
LONG BEACH	56.9	57.8	0.9
SUNFLOWER	35.6	36.5	0.9
FOREST	40.0	40.9	0.9
WESTERN LINE	40.9	41.8	0.9
SMITH	42.5	43.2	0.7
NEW ALBANY	48.0	48.7	0.7
PEARL RIVER	41.8	42.5	0.7
MADISON	46.1	46.7	0.6
NEWTON SEP	45.1	45.7	0.6
WEBSTER	48.9	49.5	0.6
KOSCIUSKO	47.4	48.0	0.6
WEST TALLAHATCHIE	27.2	27.7	0.5
CORINTH	49.0	49.5	0.5

Appendix M
Table 2 (Continued)

School District (Sorted by Average Gain)	8th Grade Reading Score without ARIs (1990)	8th Grade Reading Score with ARIs (1991-93 Average)	Average Gain (Loss) in Reading Scores (Difference between scores of 8th graders without and with ARIs)
OCEAN SPRINGS	55.8	56.3	0.5
PRENTISS	43.4	43.9	0.5
WALTHALL	39.4	39.8	0.4
BILOXI	49.8	50.2	0.4
UNION	48.7	49.1	0.4
VICKSBURG-WARREN	43.7	44.1	0.4
GREENVILLE	39.2	39.5	0.3
CARROLL	36.3	36.5	0.2
WAYNE	45.6	45.7	0.1
CLAY	33.3	33.4	0.1
NEWTON COUNTY	45.6	45.7	0.1
OKOLONA	41.1	41.2	0.1
BENTON	36.8	36.8	0.0
CLINTON	56.0	56.0	0.0
LOUISVILLE	42.0	42.0	0.0
ITAWAMBA	46.6	46.6	0.0
FORREST	49.1	49.0	(0.1)
HATTIESBURG	44.9	44.8	(0.1)
RICHTON	44.9	44.7	(0.2)
SOUTH PIKE	37.5	37.3	(0.2)
CHOCTAW	44.3	43.9	(0.4)
PASCAGOULA	48.1	47.7	(0.4)
COPIAH	39.3	38.8	(0.5)
HANCOCK	43.5	42.9	(0.6)
ALCORN	49.3	48.7	(0.6)
EAST JASPER	39.3	38.7	(0.6)
COVINGTON	39.1	38.4	(0.7)
SCOTT	42.6	41.9	(0.7)
JEFFERSON DAVIS	36.1	35.4	(0.7)
MONROE	45.9	45.1	(0.8)
IUKA	50.6	49.8	(0.8)
STARKVILLE	47.8	46.9	(0.9)
HOLLY SPRINGS	32.4	31.5	(0.9)
JACKSON SEPARATE	41.9	41.0	(0.9)
YAZOO CITY	35.8	34.9	(0.9)
AMITE	39.6	38.7	(0.9)
LUMBERTON LINE	43.2	42.3	(0.9)
TISHOMINGO	49.4	48.4	(1.0)
LEAKE	38.7	37.5	(1.2)
SOUTH TIPPAH	46.3	45.0	(1.3)
LEE	45.7	44.4	(1.3)
WEST POINT	40.7	39.4	(1.3)

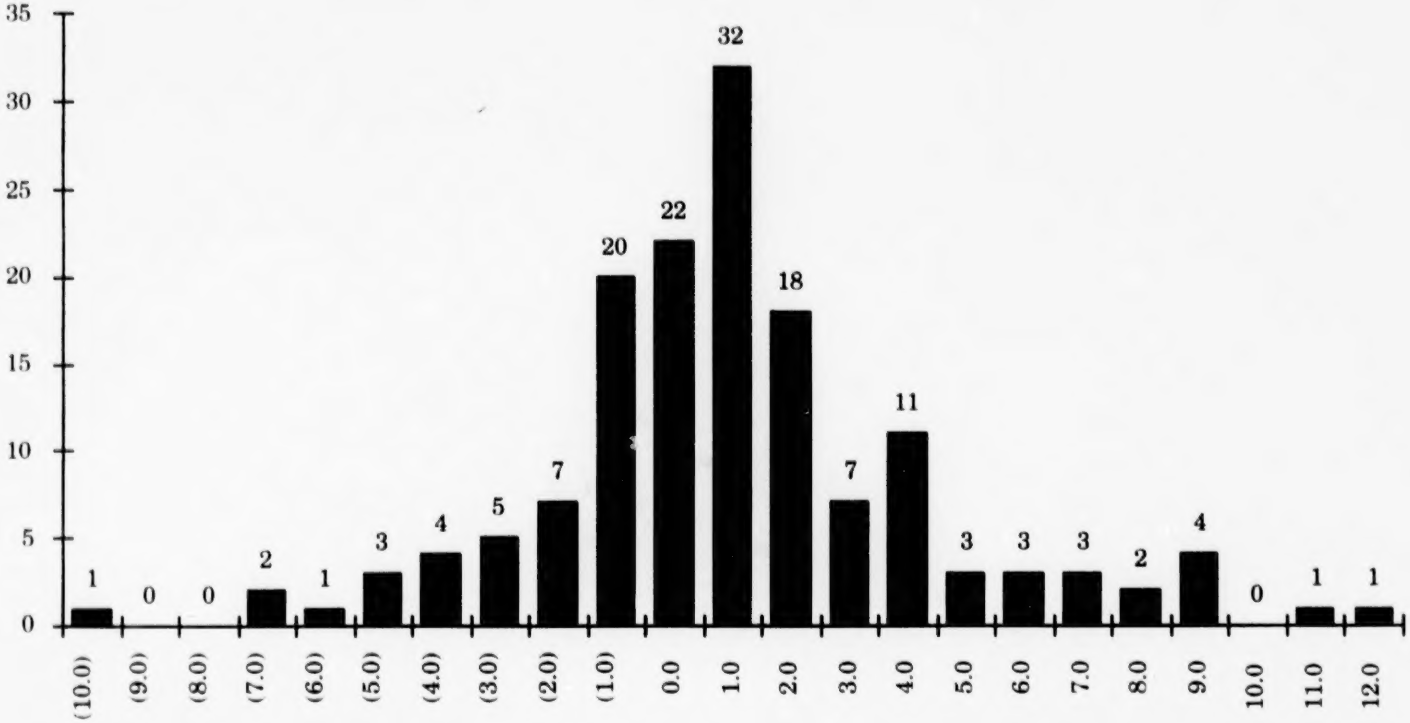
Appendix M
Table 2 (Continued)

School District (Sorted by Average Gain)	8th Grade Reading Score without ARIs (1990)	8th Grade Reading Score with ARIs (1991-93 Average)	Average Gain (Loss) in Reading Scores (Difference between scores of 8th graders without and with ARIs)
LAFAYETTE	46.8	45.4	(1.4)
PEARL	48.2	46.8	(1.4)
POPLARVILLE	48.6	47.1	(1.5)
BOONEVILLE	50.9	49.3	(1.6)
EAST TALLAHATCHIE	38.1	36.5	(1.6)
COLUMBIA	48.4	46.8	(1.6)
LINCOLN	43.0	41.3	(1.7)
WATER VALLEY	42.4	40.6	(1.8)
TATE	40.2	38.4	(1.8)
INDIANOLA	37.8	36.0	(1.8)
LAUDERDALE	46.4	44.6	(1.8)
PHILADELPHIA	45.2	43.4	(1.8)
COLUMBUS	43.7	41.8	(1.9)
JONES	47.0	45.1	(1.9)
MCCOMB	46.1	44.1	(2.0)
TUPELO	52.2	50.2	(2.0)
DESOTO	49.3	47.2	(2.1)
SOUTH PANOLA	43.2	40.9	(2.3)
HINDS	44.1	41.7	(2.4)
LAMAR	51.0	48.3	(2.7)
LAUREL	45.3	42.6	(2.7)
YAZOO	42.1	39.1	(3.0)
HAZELHURST	35.6	32.4	(3.2)
CLARKSDALE	43.6	40.2	(3.4)
QUITMAN CONSOLIDATED	46.8	43.2	(3.6)
CALHOUN	46.3	42.4	(3.9)
OKTIBBEHA	35.9	32.0	(3.9)
GREENWOOD	42.7	38.6	(4.1)
GRENADA	46.9	42.8	(4.1)
SIMPSON	41.5	37.4	(4.1)
AMORY	48.7	43.9	(4.8)
DREW	42.0	36.8	(5.2)
MARION	44.2	38.8	(5.4)
SHARKEY ISSAQUENA	36.7	31.0	(5.7)
SENATOBIA	55.4	49.2	(6.2)
DURANT	45.2	37.6	(7.6)
NETTLETON LINE	48.5	40.9	(7.6)
HUMPHREYS	50.1	39.2	(10.9)
HOLLY BLUFF (Later Consolidated)	22.3		
STATE AVERAGE	43.4	43.6	0.2

Appendix M

Table 3

Number of School Districts by Average Gain (Loss) in Stanford Achievement Test Reading Scores for Eighth-Graders Who Had Assistant Reading Instructors in Their Primary Years Compared to Those Who Did Not



SOURCE: PEER Analysis of State Department of Education Statewide Testing Data, 1990-1993.

Appendix N

Statewide Averages, Without and With Assistant Reading Instructors

Table 1

Average Normal Curve Equivalent Scores of Mississippi Students, Stanford Achievement Test, 1988-1994

		4th*	6th		8th**	
Reading	1988	48.4	**48.7**	**W/o**		
	1989	48.3	**48.3**	**W**		
	1990	42.6	43.9	**W**	**43.4**	**W/o**
	1991	44	45	**W**	**43.6**	**W**
	1992	44.7	45.2		43.1	**W**
	1993	45.6	45.6		44	**W**
	1994	45.7	46.2		43.3	
Math	1988	51.1	**51.7**	**W/o**		
	1989	50	**50.2**	**W**	**47.4**	**W/o**
	1990	49.2	47.5	**W**	**49.1**	**W/o**
	1991	51.3	50	**W**	**50**	**W**
	1992	52.6	50.6		49.7	**W**
	1993	53.8	51.1		50.7	**W**
	1994	54.2	49.6		48.7	
Language	1988	52.3	**52.6**	**W/o**		
	1989	51.1	**50.8**	**W**	**47.6**	**W/o**
	1990	49	48.8	**W**	**50**	**W/o**
	1991	51	50.6	**W**	**50.8**	**W**
	1992	51.8	50.8		50.8	**W**
	1993	52.4	51.2		51.8	**W**
	1994	53.1	51.8		52.9	

"W/o" designates the group of students who started school just before the Reading Improvement Program (assistant reading instructor program) began, and therefore went through their primary years without this program.

"W" designates the group of students who started school just after the Reading Improvement Program (assistant reading instructor program) began, and therefore went through their primary years with this program.

In the absence of controlled evaluation studies, comparing the scores of these two groups of students provides the most valid means of assessing differences between students who had and did not have the program because the first groups with assistant reading instructors (W) are least likely to differ from the pre-program group (W/o) on other factors that might complicate the comparison.

* This testing program began too late (1988) to test fourth-graders who did not have assistants.

** SDE did not test the eighth grade in 1988; the 1989 test did not have a comparable reading subtest.

SOURCE: PEER analysis of test data.

Appendix N (continued)

Table 2

Percentile Ranks for Average Scores of Mississippi Students on National Norms, Stanford Achievement Test, 1988-1994

Test		**Grade**		
		4th*	6th	8th**
Reading	1988	47	**48 W/o**	
	1989	47	**47 W**	
	1990	36	39 **W**	**38 W/o**
	1991	39	41 **W**	**38 W**
	1992	40	41	37 **W**
	1993	42	42	39 **W**
	1994	42	43	38
Math	1988	52	**53 W/o**	
	1989	50	**50 W**	**45 W/o**
	1990	49	45 **W**	**48 W/o**
	1991	53	50 **W**	**50 W**
	1992	55	51	49 **W**
	1993	57	52	51 **W**
	1994	58	49	48
Language	1988	54	**55 W/o**	
	1989	52	**52 W**	**46 W/o**
	1990	48	48 **W**	**50 W/o**
	1991	52	51 **W**	**52 W**
	1992	53	52	52 **W**
	1993	55	52	53 **W**
	1994	56	53	56

"W/o" designates the group of students who started school just before the Reading Improvement Program (assistant reading instructor program) began, and therefore went through their primary years **without this program.**

"W" designates the group of students who started school just after the Reading Improvement Program (assistant reading instructor program) began, and therefore went through their primary years **with this program.**

In the absence of controlled evaluation studies, comparing the scores of these two groups of students provides the most valid means of assessing differences between students who had and did not have the program because the first groups with assistant reading instructors (W) are least likely to differ from the pre-program group (W/o) on other factors that might complicate the comparison.

* This testing program began too late (1988) to test fourth-graders who did not have assistants.

** SDE did not test the eighth grade in 1988; the 1989 test did not have a comparable reading subtest.

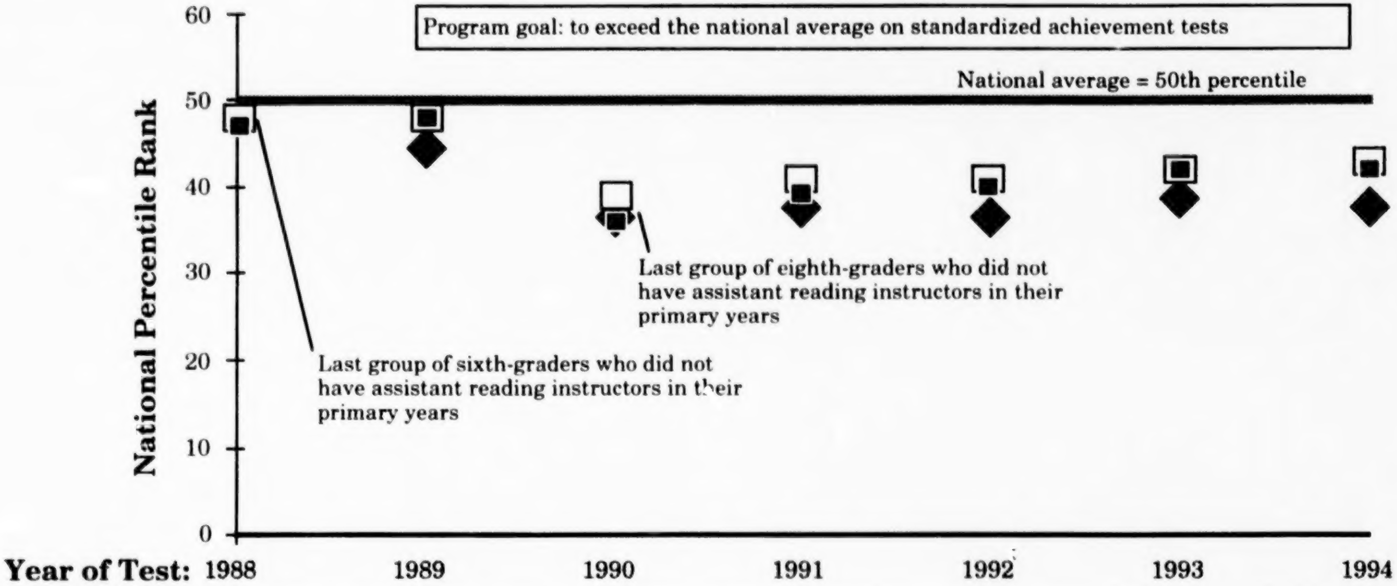
NOTE: Percentile ranks show the percent of the national comparison group whose achievement was lower than Mississippi's average score.

Appendix O

Average Percentile Ranks of Mississippi's Fourth-, Sixth-, and Eighth-Grade Students on the Stanford Achievement Test, 1988-1994

Table 1

Reading Subtest



Program goal: to exceed the national average on standardized achievement tests

National average = 50th percentile

Last group of eighth-graders who did not have assistant reading instructors in their primary years

Last group of sixth-graders who did not have assistant reading instructors in their primary years

"W" (**with** the program in place) indicates that the group tested in that year had assistant reading instructors in their primary years (grades K or 1 through grades 2 or 3).

"W/o" (**without** the program) indicates that the group tested in that grade in that year did not have assistant reading instructors.

■ Grade 4:	W	W	W	W	W	W	W
☐ Grade 6	W/o	W	W	W	W	W	W
◆ Grade 8	W/o	W	W/o	W	W	W	W

Note: The Stanford Achievement Test is the only nationally normed, standardized achievement test administered consistently after implementation of the Reading Improvement Program (the assistant reading instructor program). The Stanford Achievement Test was administered statewide only to students in the fourth, sixth, and eighth grades. This testing program began too late (1988) to test fourth-graders who did not have assistant reading instructors in their primary years (i.e., groups who entered first grade in 1982-83 and earlier). Declines in 1990 may be attributable in part to a change in the form of the test used after 1989.

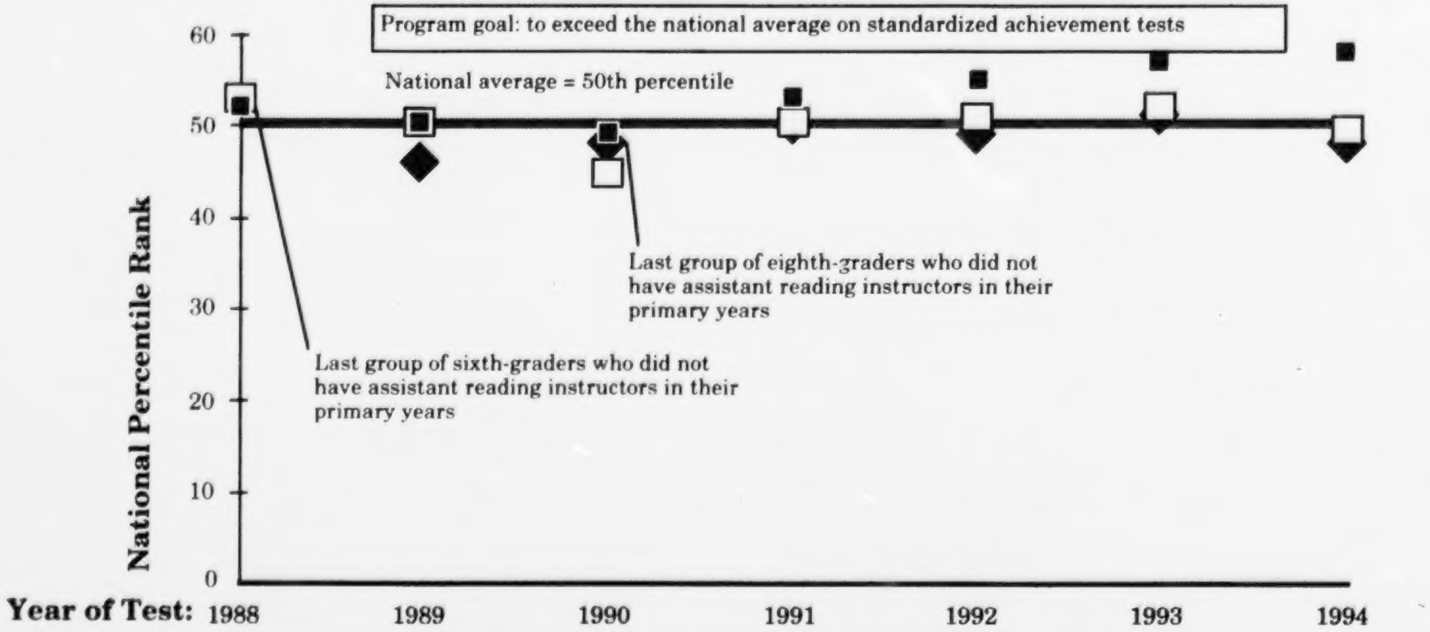
SOURCE: PEER analysis of Department of Education statewide testing program data.

Appendix O

Average Percentile Ranks of Mississippi's Fourth-, Sixth-, and Eighth-Grade Students on the Stanford Achievement Test, 1988-1994

Table 2

Mathematics Subtest



"W" (**with** the program in place) indicates that the group tested in that year had assistant reading instructors in their primary years (grades K or 1 through grades 2 or 3).

"W/o" (**without** the program) indicates that the group tested in that grade in that year did not have assistant reading instructors.

■ Grade 4:	W	W	W	W	W	W	W
□ Grade 6	W/o	W	W	W	W	W	W
◆ Grade 8	W/o	W	W/o	W	W	W	W

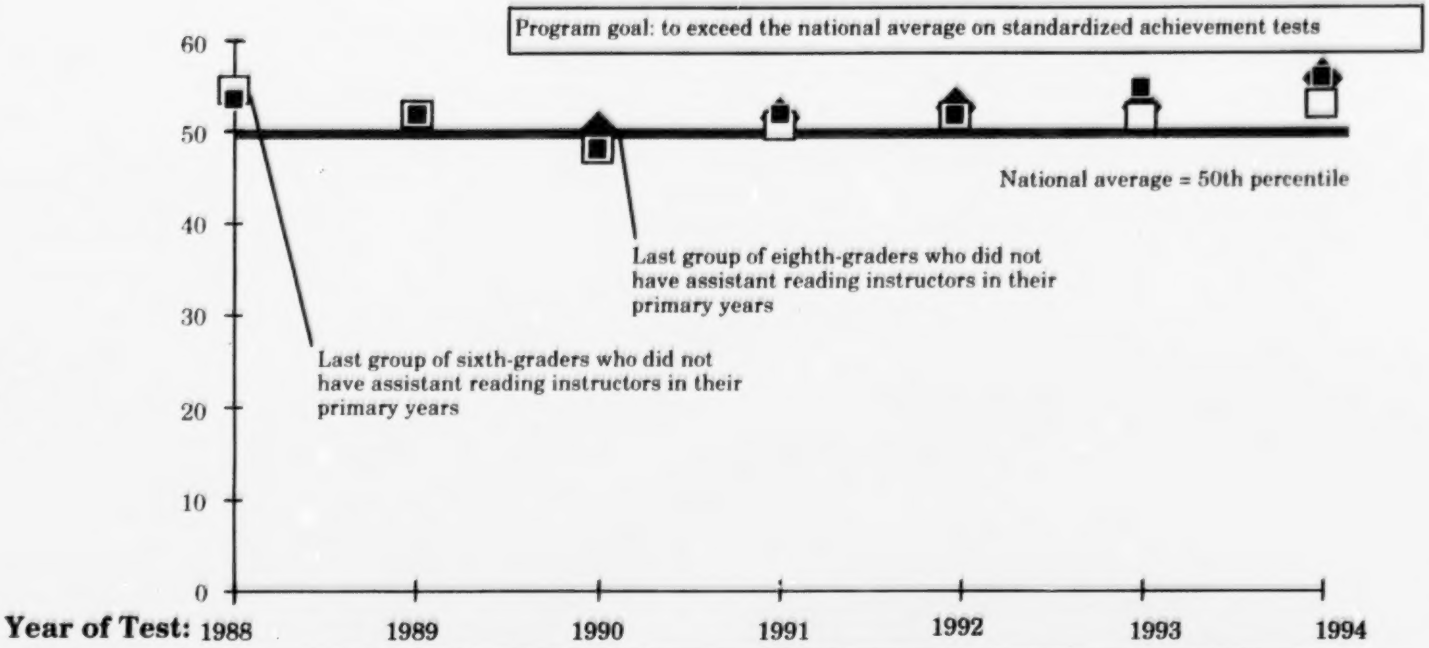
Note: The Stanford Achievement Test is the only nationally normed, standardized achievement test administered consistently after implementation of the Reading Improvement Program (the assistant reading instructor program). The Stanford Achievement Test was administered statewide only to students in the fourth, sixth, and eighth grades. This testing program began too late (1988) to test fourth-graders who did not have assistant reading instructors in their primary years (i.e., groups who entered first grade in 1982-83 and earlier). Declines in 1990 may be attributable in part to a change in the form of the test used after 1989.

Appendix O

Average Percentile Ranks of Mississippi's Fourth-, Sixth-, and Eighth-Grade Students on the Stanford Achievement Test, 1988-1994

Table 3

Language Subtest



"W" (**with** the program in place) indicates that the group tested in that year had assistant reading instructors in their primary years (grades K or 1 through grades 2 or 3).

"W/o" (**without** the program) indicates that the group tested in that grade in that year did not have assistant reading instructors.

■ Grade 4:	W	W	W	W	W	W	W
☐ Grade 6	W/o	W	W	W	W	W	W
◆ Grade 8	W/o	W/o	W/o	W	W	W	W

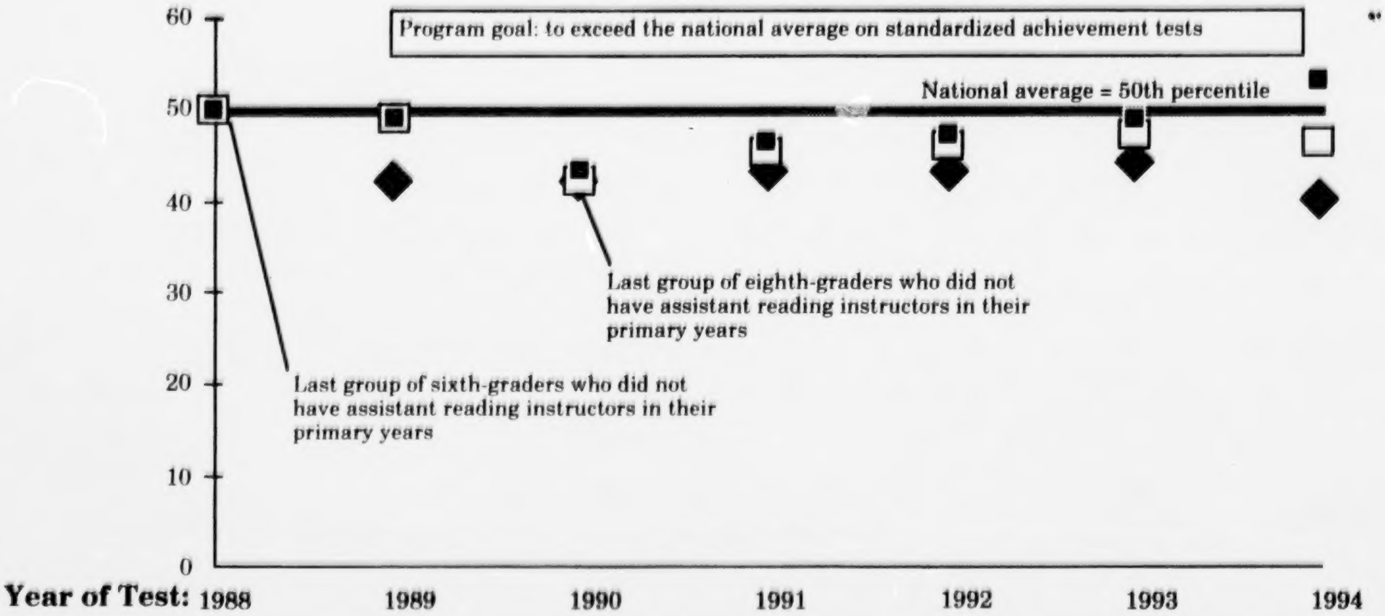
Note: The Stanford Achievement Test is the only nationally normed, standardized achievement test administered consistently after implementation of the Reading Improvement Program (the assistant reading instructor program). The Stanford Achievement Test was administered statewide only to students in the fourth, sixth, and eighth grades. This testing program began too late (1988) to test fourth-graders who did not have assistant reading instructors in their primary years (i.e., groups who entered first grade in 1982-83 and earlier). Declines in 1990 may be attributable in part to a change in the form of the test used after 1989.

Appendix O

Average Percentile Ranks of Mississippi's Fourth-, Sixth-, and Eighth-Grade Students on the Stanford Achievement Test, 1988-1994

Table 4

Complete Test Battery



"W" (**with** the program in place) indicates that the group tested in that year had assistant reading instructors in their primary years (grades K or 1 through grades 2 or 3).

"W/o" (**without** the program) indicates that the group tested in that grade in that year did not have assistant reading instructors.

■ Grade 4:	W	W	W	W	W	W	W
☐ Grade 6	W/o	W	W	W	W	W	W
◆ Grade 8	W/o	W	W/o	W	W	W	W

Note: The Stanford Achievement Test is the only nationally normed, standardized achievement test administered consistently after implementation of the Reading Improvement Program (the assistant reading instructor program). The Stanford Achievement Test was administered statewide only to students in the fourth, sixth, and eighth grades. This testing program began too late (1988) to test fourth-graders who did not have assistant reading instructors in their primary years (i.e., groups who entered first grade in 1982-83 and earlier). Declines in 1990 may be attributable in part to a change in the form of the test used after 1989.

Appendix P

Example of Duties and Responsibilities of the Assistant Reading Instructor

1.0 General Duties and Responsibilities:

1.1 To be administratively supervised by the building principal
1.2 To be directed daily under the supervision of a certified classroom teacher
1.3 To attend and actively participate in inservice training programs
1.4 To assist as directed in improving students reading skills
1.5 To assist as directed in improving students basic skills in other academic areas
1.6 To operate within school district policies and procedures
1.7 To promote a positive image of the school district program to the public
1.8 To be an effective role model for primary grade students
1.9 To work harmoniously with staff and students
1.10 To contribute to the development and implementation of a successful instructional program

2.0 Duties and Responsibilities with Individual Students

2.1 To listen to a student read orally
2.2 To listen to a student share experiences (oral expression skills)
2.3 To assist students with reading skills problems
2.4 To assist student with basic skills problems
2.5 To assist student with manual writing shills
2.6 To assist student by interpreting directions
2.7 To help calm an upset or discouraged student
2.8 To assist student with drill or additional instruction
2.9 To review student in skills missed through absences
2.10 To work with pupils on a fixed daily schedule

3.0 Duties and Responsibilities with Small Groups of Students

3.1 To operate audio-visual programs for small groups
3.2 To assist in small group sessions with reading skills
3.3 To assist in small group sessions with basic skills
3.4 To tell or read stories to small groups
3.5 To monitor small group discussions and interactions
3.6 To go to the library with small groups of students to help them select reading material

4.0 Clerical Duties and Responsibilities

4.1 To keep records pertaining to books that students read
4.2 To aid in displaying students' work
4.3 To pass out and collect papers
4.4 To assist in preparing stencils, charts, posters, correcting work
4.5 To put work on chalkboard

5.0 Other Duties and Responsibilities

5.1 To assist in planning and conducting field trips
5.2 To assist with room arrangements such as interest centers, regrouping of furniture for group activities
5.3 To supervise independent student study
5.4 To work cooperatively with the classroom teacher in the instructional planning process
5.5 To be present during parent-teacher conferences unless directed otherwise
5.6 To assist the classroom teacher with resource files, student unit packets

SOURCE: Appendix F of the Mississippi State Department of Education's Division of Instruction's April 1983 *Guidelines for the Mississippi Reading Improvement Program.*

Appendix Q

July 22, 1994, State Department of Education Letter to District Superintendents Regarding Assistant Reading Instructors' Duties and Responsibilities

Mississippi Department of Education
Tom Burnham, Ed.D., State Superintendent of Education

Office of Academic Education
Gerald J. Hasselman, Ed.D.
Associate State Superintendent

Instructional Development
Samuel McGee, Ph.D., Director
(601)359-3778

MEMORANDUM

TO: District Superintendents

FROM: Samuel McGee, Director and Jo Prather, Reading (K-12)/ Early Childhood Director

S.M.

DATE: July 22, 1994

SUBJECT: Assistant Reading Teacher Regulations

The Mississippi Reading Improvement Program Regulations (Assistant Reading Instructor Program) has been approved by the State Board of Education and will be in effect for the 1994-95 school year. Attached is a copy of the regulations governing the assistant reading improvement program.

The assistant reading instructors were placed in the kindergarten, first, second and/or third grade classrooms during the 1982 Legislative session for the sole purpose of providing additional instruction for students in the basic skills. The assistants should not be used as aides, hall monitors, or substitute teachers. If they are not used for the purpose they were intended, then the students will not make the academic gains necessary to succeed in the world around them.

Listed below are some acceptable and unacceptable duties the assistant reading instructors may be asked to perform. Local school districts are advised to study these duties and add others that will benefit the students of the district.

The assistant reading instructors should:

- model good reading, writing, and speaking skills for students.
- reinforce and reteach basic skills with individuals or small groups.
- read stories aloud to individuals, small or large groups of students.
- discuss literature with students, allow students to:
  retell the story (sequencing),
  change characters and setting (compare and contrast),
  talk about the most exciting parts (main idea),
  write different endings to the story (evaluation), and
  do a mind map of the story (comprehension).
- write student experience stories with the student. Help students substitute words of like meaning for words used too frequently.
- be available at learning centers to coach, model, and reinforce skills provided in the centers.
- check student work with the student, reteaching as mistakes surface.

Walter Sillers Office Building, Suite 806 *Mailing address:* P.O. Box 771, Jackson, MS 39205-0771 FAX (601)359-2326

- assist the classroom teacher on the playground in teaching and coaching physical activities that strengthen large motor skills.

- encourage and guide individual students in language development through:
  - conversation with students(s),
  - playing verbal vocabulary building games,
  - developing language usage games with student(s), and
  - exchanging words with the same meaning in stories as they are read aloud to the student(s).

- reinforce proper use of materials during guided practice time in classroom.

- accompany classroom teacher to media center to reinforce and assist in using library/media skills.

- will create with individual or a small group of students learning center activities, displays for bulletin boards, or wall display areas.

- play games with student(s) that reinforce basic skills.

- monitor and encourage small cooperative group activities.

- provide small group reinforcement using hands-on activities.

The assistant reading teacher should not:

- teach or plan instruction for students.

- supervise whole group instruction or activities.

- grade and/or score sets of written work or workbooks.

- decorate bulletin boards, unless it is part of a hands-on/minds-on activity being used to support basic skills with students.

- supervise playgrounds, halls, lunchrooms, or bus waiting areas.

- be used as substitute teachers except in extreme emergencies (See Mississippi Reading Improvement Program Regulations; 6.6, 6.7, and 6.8.)

Attachment

PEER Staff

Director

John W. Turcotte

Administrative Division

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Ann Hutcherson
Deborah McMinn
Mary McNeill

Planning and Support Division

Max Arinder, Chief Analyst

Sam Dawkins
Larry Landrum
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